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DATE MAILED:

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | | ATTORNEY DOCKET NO. | | |
|-----------------|---|----------------------|---|---------------------|-----------------------|--|
| 08/486,2 | 58 - 06/07/ | 75 HARVEY | | j | - 5634.361 | |
| BOX 34 | HOWREY SIMON ARNOLD & WHITE LLP BOX 34 | | 乛 | | EXAMINER LUTHER, W | |
| | NSYLVANIA A ON DC 20004 | | | ART UNIT | PAPER NUMBER | |

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

03/30/00

Office Action Summary

Application No. 08/486,258

licant(s)

Harvey et al.

Examiner

WILLIAM LUTHER

Group Art Unit 2731



| Responsive to communication(s) filed on | | | |
|---|--|--|--|
| ☐ This action is FINAL . | | | |
| ☐ Since this application is in condition for allowance except for formal matters, pro in accordance with the practice under Ex parte Quay@35 C.D. 11; 453 O.G. 213. | esecution as to the merits is closed | | |
| A shortened statutory period for response to this action is set to expire3 m longer, from the mailing date of this communication. Failure to respond within the period application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obta 37 CFR 1.136(a). | od for response will cause the | | |
| Disposition of Claim | | | |
| X Claim(s) (see attached Office Action for status of the pending claims) | is/are pending in the applicat | | |
| Of the above, claim(s) is/are withdrawn from c | | | |
| ☐ Claim(s) | is/are allowed. | | |
| ☐ Claim(s) | is/are rejected. | | |
| ☐ Claim(s) | is/are objected to. | | |
| ☐ Claims are su | bject to restriction or election requirement. | | |
| Application Papers See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948. The drawing(s) filed on is/are objected to by the Exami The proposed drawing correction, filed on is approv The specification is objected to by the Examiner. The oath or declaration is objected to by the Examiner. The oath or declaration is objected to by the Examiner. Priority under 35 U.S.C. § 119 Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(i) AllSome*None of the CERTIFIED copies of the priority documents received received in Application No. (Series Code/Serial Number) received in this national stage application from the International Bureau (Final Computer Series | ved _disapproved. a)-(d). have been PCT Rule 17.2(a)). | | |
| Attachment(s) Notice of References Cited, PTO-892 Information Disclosure Statement(s), PTO-1449, Paper No(s). Interview Summary, PTO-413 Notice of Draftsperson's Patent Drawing Review, PTO-948 Notice of Informal Patent Application, PTO-152 | | | |
| SEE OFFICE ACTION ON THE FOLLOWING PAG | SES | | |

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DETAILED ACTION

1. This action is in response to 4/30/99. Remarks that exist for pending claims 6-235, have been considered but are most in view of the new ground(s) of rejection.

Overview.

As a preliminary matter, it is understood that applicants and the PTO have agreed to consolidate co-pending applications from ~329 in number to ~78 in number wherein applicants "claim" priority benefit under Section 120 for ~41/78 to 9/11/87 ('87), and ~37/78 to 11/3/81 ('81). However, to date, applicants have failed to complete the consolidation. For example and for illustration, in the group of 37/78, examiner finds consolidation papers for only 23 of 37. Applicants must understand that their failure, to date, to complete the consolation has contributed to delay in prosecution, noting that the agreement to consolidate was made over an entire year ago. Clarification is requested for when applicants intend to carry forth completion of their

¹See Appendix **B** for examiners count of cases having consolidation papers. It is noted, for ex, that "group" 8 fails to map the claims, and hence is not within consonance of agreement and therefore is recognized as an amendment to an outstanding office action.

²For illustration, it is noted that the co-pending application no. 08/474,964 (see "group" 30 in Appendix **B)** consolidation was received 3/9/99. Therein, on page 9 (paper 20), applicants allege "In consonance with the agreement...Applicants...join the claims", etc.

agreement. In any event, Office actions have been mailed on 2 consolidated groups³, and the remaining now follow.

Section 112.

Written description.

In the Summer/Fall '97, responses to the ~37/78 co-pending applications' first actions' on the merits, applicants claim priority benefit, under Section 120, to 11/3/81. However, when responding to Section 112 written description rejections, applicants refer to the *parent* patent 4,694,490, ('490) disclosure as "the specification". However, it appears they have mistaken the patent '490 specification for the instant specification. The reason the instant specification is not the '490 specification is because applicants failed to incorporate-by-reference the '490 ('81) specification into the later '87 specification first disclosed on 11/9/87. Because, *inter alia*, it appears applicants have:

- generally ignored the instant specification; and
- apparently drafted the pending claims with respect to "only" the '81 disclosure; and
- generally responded to Section 112 written description rejections by citing sentences passages, and paragraphs, that *do not exist* in the instant disclosure;

pending claims are rejected as failing Section 112's written description requirement.

³Groups 27 and 33 in Appendix **B**, or co-pending applications 08/470,571, and 08/487,526, respectively.

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Because applicants have apparently mistaken the parent '490 disclosure for the instant disclosure, all pending claims are rejected under Section 112's written description requirement. Each claim has been raised into doubt by the manner in which applicants have responded to previous Section 112 rejections. Hence, examiner respectfully requests applicants to:

- identify any disclosure *common* to both the parent '490 and the instant disclosure, and then demonstrate full support under Section 112, by *only* the common subject matter. Examiner respectfully requests that applicants be *very careful not to* identify subject matter that was omitted when making the 9/11/87, disclosure; and be *very careful not to* identify subject matter that was added when making the 9/11/87, disclosure. The consequence, of course, would be failure to demonstrate Section 112's written description requirement.

Moreover, because, *inter alia*, applicants have apparently mistaken the parent '490 disclosure for the instant disclosure, Section 112 written description doubt has been raised by applicants. As a consequence, *examiner respectively requests applicants demonstration* support for at least every pending claim in the manner described above. However, it is suggested applicants demonstrate support for each phrase enumerated in the Section 112 written description rejection below.

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Enablement:

Moreover, terms and their derivatives such as 'digital' and 'data', *inter alia*, are considered to require undue experimentation in view of the *instant* disclosure. Therefore, pending claims reciting the terms and derivatives of the terms are rejected under Section 112's enablement requirement.

Best Mode:

Notwithstanding, for the reasons, *inter alia*, explained below in the corresponding rejection below, pending claims are rejected under Section 112's best mode requirement.

Second Paragraph.

Further, because applicants have apparently mistaken the parent '490 disclosure for the instant disclosure, pending claims are rejected under Section 112's second paragraph for reasons, inter alia, including: failure to claim the invention; failure to recite terms whose meets and bounds can be determined from a reading of the instant disclosure. This rejection may be withdrawn when applicants accurately explain the specific meaning of every pending claim term when there are different descriptions for such terms from '81 and '87 including, inter alia: programming; data; information; instruction; signal; and every other term having a difference in respective '81 and '87 descriptions.

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Double Patenting.

Pending claims are rejected under the doctrine of judge made double patenting as they

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would extend obvious variations of already enjoyed monopolies. Pending claims are not distinct

and independent from patents: 5,335,277 ('277); 5,233,654 ('654); 5,109,414 ('414); 4,965,825

('825); 4,704,725 ('725); 4,694,490 ('490).

See Appendix A.

Notwithstanding, applicants have recognized his patents have been involved in litigation.

Examiner believes it is *critical* that applicants provide claim constructions for his patents from

those litigations, for obvious type double patenting examination, as they are understood to be

directly relevant to the instant rejections.

The Administrative requirement is maintained.

Sections 102 and 103.

For the benefit of compact prosecution, examiner addresses the pending claims as

thoroughly as possible with other prior art in rejection, even though applicants have apparently

mistaken the parent '490 disclosure for the instant disclosure.

However, because the '490 parent disclosure is very brief, for ex, approximately 11,800

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words, examiner addresses the pending claims to the *limited* extent they are *conceptually* recognized by examiner, in *embodiments previously identified* by applicants when mistaking the parent '490 disclosure for the instant disclosure in response to, *inter alia*, previous Section 112 written description rejections. That is to say that pending claims are *grouped conceptually* and are addressed by application of prior art according to their conceptual grouping.

Although applicants, in fact, omitted most sentences, paragraphs, and figures, of the parent '490 disclosure when making the later 9/11/87 (co-pending parent 08/113,329)('329), disclosure, (i.e. corresponding to the instant disclosure) they allege to have incorporated-by-reference the documents, paper 21 of '329, *inter alia*, *into page 1* of the 9/11/87, disclosure when making the instant disclosure on ~6/95 (see respective preliminary amendments accompanying Section 120 filings of co-pending applications). Section 120, however, does not permit the apparent hiatus of subject matter, from 9/11/87, to '95, i.e., the instant filing date, for the priority benefit under Section 120 to the 11/3/81, disclosure. Hence the added subject matter is not impermissible new matter. However, it is anticipated by the '490 and '725 patents when it gets the '95 effective filing date.

Oath or Declaration.

The instant disclosure appears, *in fact*, to be a continuation-in-part, because, by applicants' own indication, the intention of the preliminary amendment's' 'incorporation-by-

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reference' statement, was for incorporating all documents of the '329 parent into page 1 of the

instant disclosure (applicants should refer to the related remarks, they have provided, on the

record).

Objection to the Specification.

The instant specification is objected to because applicants are changing the instant

disclosure, some +18 years after making the '81 disclosure and some +12 years after making the

'87 disclosure.

I.D.S.

Examiner specifically requests applicants identify the most relevant art, in the

information disclosure statements, to the pending claims. Examiner believes identification of

such art is critical to determining patentability.

Claim Rejections - 35 U.S.C. § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to

make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 6-235, are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Considering claim 6, there is no support for:

- -A method of;
- -generating;
- -and delivering;
- -an individualized mass medium program presentation at;
- -a receiver station;
- -said receiver station having;
- -a receiver for receiving;
- -a mass medium program signal;
- -a computer for generating;
- -and communicating information;
- -and one;
- -or more output devices operatively connected to;
- -said receiver and:
- -said computer for delivering to;
- -a viewer;
- -a mass medium program;
- -and computer information, with;
- -said computer comprising one;
- -or more data storage locations;
- -said method comprising the steps of:
- -storing;
- -a timing signal;
- -and viewer interest identification data specifying;
- -a plurality of;
- -different viewer interests;
- -controlling;
- -said computer;
- -a first time based on;
- -a comparison of;
- -said timing signal or;

-said viewer interest identification data; -to other data: -said first step of; -controlling comprising: -(1) inputting into; -said computer further data designating; -a viewer interest of; -said plurality of; -different viewer interests or; -a time; -(2) selecting; -a plurality of signals each selected signal including; -mass medium program information content; -or; -a control signal respecting; -said viewer interest and; -(3) storing each selected signal at; -a storage location; -controlling; -said computer; -a second time based on; -said comparison; -said second step of; -controlling comprising: -(1) selecting one; -or; -more; -computer programming instructions; -(2) generating mass medium program; -information; -content; -in respect to; -a second viewer interest of; -said plurality of; -different viewer interests and; -(3) preparing; -to communicate; -said generated mass medium program information;

-output devices.

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-content upon;
-instruction;
-controlling;
-said computer;
-a third time based on;
-said timing signal;
-or said;
-comparison;
-said third step of;
-controlling comprising:
-(1) selecting;
-a portion of;
-said mass medium program;
-information content;
-(2) selecting;
-a location and;
-(3) communicating;
-said selected mass medium program;
-information content to;
-said selected location and;
-presenting to;
-a subscriber at;
-a controlled time;
-said mass medium program with;
-said generated mass medium program information content, with;
-said mass medium;
-program and;
-said generated mass medium program;
-information;
-content;
-being outputted;
-to said subscriber either as;
-a combined:
-or sequential presentation at;
-an output device or;
-as parallel presentations at;
-a plurality of;
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Considering claim 7, there is no support for:

- -A method of;
- -generating;
- -and delivering;
- -an individualized;
- -mass medium program presentation at;
- -a receiver station;
- -said receiver station having a;
- -receiver for receiving;
- -a mass medium program signal;
- -a computer for generating and;
- -communicating information;
- -and one;
- -or more output devices operatively connected to;
- -said receiver and;
- -said computer for delivering to;
- -a viewer;
- -a mass medium program and;
- -computer information, with;
- -said computer comprising one;
- -or more data storage locations;
- -said method comprising the steps of:
- -storing;
- -a timing signal and;
- -a plurality of;
- -identification signals specifying different;
- -viewer interests;
- -controlling;
- -said computer;
- -a plurality of times;
- -each time based on;
- -a comparison of;
- -said timing signal;
- -or identification signals;
- -to other data;
- -said first step of;
- -controlling;
- -comprising each time:
- -(1) inputting further data designating;

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-a viewer interest of;
-said different viewer interests or;
-a time;
-(2) selecting;
-a signal;
-each selected signal including data;
-information content;
-or;
-a control signal respecting;
-a mass medium program and;
-(3) storing each selected signal at;
-a storage location;
-some of;
-said selected stored signals designating;
-said different viewer interests;
-controlling;
-said computer based on;
-said comparison;
-said second step of;
-controlling comprising:
-(1) selecting one;
-or more computer programming instructions;
-(2) generating mass medium program information content;
-with respect to;
-a second viewer interest and;
-(3) preparing;
-to communicate;
-said generated mass medium program information;
-content;
-upon instruction;
-controlling;
-said computer based on;
-said timing signal or;
-said comparison, said;
-third step of;
-controlling comprising:
-(1) selecting;
-a portion of;
-said mass medium program information content;
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-(2) selecting;
-a location and;
-(3) communicating;
-said selected mass medium program;
-information;
-content to:
-said selected location and;
-presenting to;
-a subscriber at;
-a controlled time;
-said mass medium program with;
-said generated mass medium program;
-information content, with;
-said mass medium program and;
-said generated mass medium program;
-information content;
-being outputted to:
-said subscriber either as;
-a combined;
-or sequential presentation at;
-an output device;
-or as parallel presentations at;
-a plurality of;
```

Considering claim 8, there is no support for:

-output devices.

- -A method of;
- -generating;
- -and delivering;
- -an individualized;
- -mass medium program presentation at;
- -a receiver station;
- -said receiver station having a;
- -receiver for receiving;
- -a mass medium program signal;
- -a computer for generating and;
- -communicating information;
- -and one;
- -or more output devices operatively connected to;

-said receiver and; -said computer for delivering to; -a viewer; -a mass medium program and; -computer information, with; -said computer comprising one; -or more data storage locations; -said method comprising the steps of; -storing; -a timing signal; -and identification data; -each identification datum; -specifying; -a plurality of; -different viewer interests: -controlling; -said computer; -a first time based on; -a comparison of; -said timing signal; -or identification data; -to other data: -said first step of; -controlling comprising: -(1) inputting to; -said computer data designating; -a viewer interest of; -said plurality of; -different viewer interests or; -a time; -(2) selecting; -a first signal; -each selected first signal including data; -information content; -a control signal respecting; -a mass medium program presentation and; -(3) storing each selected first signal at; -a storage location;

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-controlling;
-said computer;
-a second time based on;
-said comparison;
-said second step of;
-controlling comprising:
-(1) inputting data designating;
-a second viewer interest of;
-said plurality of;
-different viewer interests or;
-a time;
-(2) selecting;
-a second signal;
-each selected second signal including;
-information content;
-or;
-a control signal respecting;
-a mass medium program presentation and;
-(3) communicating;
-said computer;
-a third time based on;
-said comparison;
-said third step of;
-controlling comprising:
-(1) inputting data designating;
-a third viewer interest or;
-a time;
-(2) selecting;
-a third signal;
-each selected;
-third signal including mass medium program;
-information content and;
-a control signal and;
-(3) communicating each selected third signal to;
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-a processor and;-an output device;-presenting to;-a subscriber;

-said mass medium program with;

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-said mass medium program information content, with;
               -said mass medium program and;
               -said mass medium program information content;
               -being outputted to:
               -said subscriber either as;
               -a combined:
               -or sequential presentation at;
               -an output device;
               -or as parallel presentations at;
               -a plurality of;
               -output devices.
Considering claim 9, there is no support for:
              -A method of;
              -generating;
              -and delivering;
              -an individualized mass medium program presentation at;
              -a receiver station;
              -said receiver station having;
              -a receiver for receiving;
              -a mass medium program signal;
              -a computer for generating;
               -and communicating information;
              -and one;
              -or more output devices operatively connected to;
              -said receiver and;
              -said computer for delivering to;
              -a viewer;
              -a mass medium program;
              -and computer information, with;
              -said computer comprising one;
              -or more data storage locations;
              -said method comprising the steps of:
              -storing;
              -a timing signal;
              -and signal identification data designating;
              -a specific signal type;
              -controlling;
              -said computer;
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-a first time based on;
-a comparison of;
-said timing signal or;
-said signal identification data;
-or other data;
-said first step of;
-controlling comprising:
-(1) selecting;
-a first signal;
-each selected first signal including data;
-information content;
-or:
-a control signal respecting;
-a mass medium program presentation and;
-(2) storing each selected first signal at;
-a storage location;
-controlling;
-said computer;
-a second time based on;
-said comparison;
-said second step of;
-controlling comprising:
-(1) selecting;
-a second signal;
-each selected second signal including information content;
-or:
-a control signal respecting;
-a mass medium program presentation and;
-(2) communicating each selected second signal to;
-a processor or;
-an output device;
-controlling;
-said computer;
-a third time based on;
-said comparison;
-said third step of;
-controlling comprising:
-(1) identifying;
-a third signal;
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-output devices.

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-each identified third signal being;
-a control signal designating;
-a signal type and;
-(2) communicating each identified third signal to;
-a processor and;
-an output device;
-controlling;
-said computer;
-a fourth time based on;
-said comparison;
-said fourth step;
-of controlling comprising:
-(1) selecting;
-a first signal or;
-said timing signal and;
-(2) generating;
-or communicating;
-some;
-mass medium program information;
-content;
-in response to;
-a control signal and;
-presenting to;
-a subscriber;
-a mass medium program with;
-said mass medium;
-program information content, with;
-said mass medium program and;
-said mass medium;
-program content information content;
-being outputted to;
-said subscriber either as a;
-combined:
-or sequential presentation at;
-an output device;
-or as parallel presentations at a;
-plurality of;
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Considering claim 10, there is no support for:

- -A method of;
- -generating;
- -and delivering;
- -an individualized mass medium program presentation at;
- -a receiver station;
- -said receiver station having;
- -a receiver for receiving;
- -a mass medium program signal;
- -a computer for generating;
- -and communicating information;
- -and one;
- -or more output devices operatively connected to;
- -said receiver and;
- -said computer for delivering to;
- -a viewer;
- -a mass medium program;
- -and computer information, with;
- -said computer comprising one;
- -or more data storage locations;
- -said method comprising the steps of:
- -storing;
- -a timing signal and;
- -a plurality of;
- -a first data;
- -each first datum designating;
- -a different type of;
- -signal;
- -controlling;
- -said computer one;
- -or more times based on;
- -a comparison;
- -said first step of;
- -controlling comprising:
- -(1) selecting;
- -a first signal;
- -each selected first signal including data;
- -information content;
- -or;

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-a control signal respecting;
-a mass medium program presentation;
-(2) storing each selected first signal at;
-a storage location;
-controlling;
-said computer based on;
-said comparison;
-said second step of;
-controlling comprising:
-(1) selecting;
-a second signal;
-each selected second signal including;
-information content;
-or;
-a control signal respecting;
-a mass medium program presentation;
-and;
-(2) communicating each selected second signal to;
-a processor or;
-an output device;
-controlling;
-said computer based on;
-said comparison;
-said third step of;
-controlling;
-comprising:
-(1) identifying;
-a third signal;
-each identified third signal being;
-a control signal designating;
-a signal type and;
-(2) communicating;
-each;
-identified;
-third signal to;
-a processor or;
-an output device;
-controlling;
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-said computer based on;
-said comparison;
-said fourth step of;
-controlling comprising:
-(1) selecting;
-a first signal or;
-a timing signal and;
-(2) generating;
-or communicating;
-some mass medium program information content;
-in response to;
-a control signal and;
-presenting to;
-a subscriber;
-a mass medium program with;
-said mass medium;
-program information content, with;
-said mass medium program and;
-said mass medium;
-program information content;
-being outputted to;
-said subscriber either as;
-a combined or;
-sequential presentation at;
-an output device;
-or as parallel presentations at;
-a plurality of;
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Considering claim 11, there is no support for:

-output devices.

- -A method of;
- -providing data of;
- -interest to;
- -a receiver station;
- -from;
- -a remote data source;
- -said data of;
- -interest for use at the receiver station in;
- -generating;

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-or outputting;
-a receiver specific datum;
-said method comprising the steps of:
-storing data at;
-said remote data source;
-receiving at;
-said remote data source;
-a query from;
-said receiver station;
-transmitting;
-said data from;
-said remote data source to;
-said receiver station in;
-response to;
-said step of;
-receiving;
-said query;
-said receiver station selecting;
-and storing;
-some of;
-said transmitted data;
-transmitting from;
-a second remote source to;
-said receiver station;
-a signal;
-which controls;
-said receiver station;
-to select;
-and process;
-an instruct signal;
-which is effective at;
-said receiver station;
-to coordinate presentation of;
-said data with;
-a separate;
-predetermined;
-presentation;
-sequence.
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Considering claim 12, there is no support for:

- -A method of;
- -communicating subscriber station information;
- -from:
- -a subscriber station;
- -to one;
- -or more remote data collection stations;
- -said method;
- -comprising the steps of:
- -inputting;
- -a viewer's;
- -or participant's reaction at;
- -a subscriber station;
- -receiving at;
- -said subscriber station information that designates;
- -an instruct;
- -signal;
- -to process or;
- -an output;
- -to deliver in consequence of;
- -subscriber input;
- -determining the presence of;
- -said subscriber input at;
- -said subscriber station;
- -by processing;
- -said viewer's;
- -or participant's reaction;
- -processing;
- -an instruct signal;
- -which is effective;
- -to coordinate presentation;
- -of data with;
- -a separate predetermined;
- -presentation;
- -sequence at;
- -said subscriber station in;
- -consequence of;
- -said step of;
- -determining and;

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-transferring from;
-said subscriber station;
-to one;
-or more remote data;
-collection stations;
-an indication confirming delivery of;
-said instruct signal based on said;
-step of;
-processing;
-or confirming delivery.
-The method of claim 12, wherein;
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Considering claim 13, there is no support for:

- -said instruct signal is;
- -input by;
- -a subscriber;
- -said method further comprising the steps of:
- -storing;
- -a subscriber instruction;
- -to receive one;
- -or more specific mass medium;
- -programs;
- -data;
- -news items;
- -or computer control instructions and;
- -receiving one;
- -or more specific mass medium programs;
- -data;
- -news items;
- -or computer control instructions in accordance with;
- -said instruction.

Considering claim 14, there is no support for:

- -The method of claim 12, wherein;
- -said instruct signal is;
- -input by;
- -a subscriber:
- -said method further comprising the steps of:
- -storing;

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-a subscriber instruction;
              -to process;
              -or present one;
              -or more mass medium;
              -programs;
              -data;
              -news items;
              -or computer control instructions in;
              -a specific fashion and;
              -processing;
              -or presenting one;
              -or more specific mass medium programs;
              -news;
              -items;
              -or;
              -computer control instructions in accordance with;
              -said instruction.
Considering claim 15, there is no support for:
              -The method of claim 12, wherein;
              -said information that designates a;
              -specific subscriber input or;
              -said instruct signal is detected in;
              -an information transmission;
              -from;
              -a data;
              -or programming source;
              -said method further comprising the steps of:
              -programming;
              -a processor;
              -to respond;
              -to information communicated from;
              -a data or;
              -programming source;
              -receiving;
              -an information transmission from;
              -a data;
              -or programming source;
```

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```
-inputting
-at least;
-some of;
-said information transmission to;
-a control signal;
-detector;
-detecting data or;
-an instruct signal in;
-said information transmission and;
-passing;
-said detected data;
-or instruct signal to;
-said processor.
-A method of;
```

Considering claim 16, there is no support for:

- -controlling;
- -a remote intermediate transmitter station;
- -to communicate data;
- -to one:
- -or more receiver stations, with;
- -said remote intermediate transmitter station;
- -including;
- -a broadcast;
- -or cablecast transmitter;
- -a plurality of;
- -selective transfer devices;
- -each;
- -operatively connected to;
- -said broadcast;
- -or cablecast transmitter;
- -a data receiver;
- -a control signal detector, and;
- -a controller;
- -or computer capable of;
- -controlling one;
- -or more of;
- -said selective transfer devices;
- -said remote intermediate transmitter station adapted;

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```
-to detect one;
-or more control signals;
-to control the communication of;
-said data;
-and;
-to deliver;
-said data to;
-said broadcast;
-or cablecast transmitter;
-said method comprising the steps of-;
-(1) receiving;
-said data:
-to be transmitted by the remote intermediate transmitter station;
-and delivering;
-said data to;
-a data transmitter;
-said data comprising;
-an instruct signal;
-which is effective at the receiver station;
-to coordinate presentation of;
-said data with;
-a separate predetermined presentation sequence;
-(2) receiving;
-said one;
-or more control signals;
-which at the remote intermediate transmitter station;
-operate;
-to control the communication of;
-said data and;
-(3) transmitting;
-said one;
-or more control signals from;
-said data transmitter before;
-a specific time.
```

Considering claim 17, there is no support for:

- -The method of claim 16, wherein;
- -said specific time is;
- -a scheduled time of;

```
-transmitting;
-said data at;
-said remote intermediate transmitter station or;
-said one;
-or;
-more;
-control signals;
-are effective at the remote intermediate transmitter station;
-to control one;
-or more of;
-said plurality of;
-selective transmission devices at different times.
```

Considering claim 18, there is no support for:

- -The method of claim 16, further comprising the step of;
- -embedding;
- -a specific one of;
- -said one;
- -or more control signals in;
- -said data before transmitting;
- -said data to;
- -said remote intermediate transmitter station.

Considering claim 19, there is no support for:

- -A method of;
- -controlling;
- -a receiver station including the steps of;
- -detecting the presence;
- -or absence of;
- -a broadcast;
- -or cablecast control signal;
- -inputting;
- -an instruct-to-react signal to;
- -a processor based on;
- -said step of;
- -detecting;
- -controlling;
- -said processor;
- -to output specific information in response to;

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```
-said step of;
-inputting;
-and coordinating presentation of;
-data with;
-a separate;
-predetermined;
-presentation sequence;
-based on;
-information received from;
-said processor based on;
-said step of;
-controlling.
```

Considering claim 20, there is no support for:

- -The method of claim 19, wherein;
- -a buffer is operatively;
- -connected to;
- -said processor for buffering input;
- -said method further comprising the step;
- -of:
- -inputting;
- -said instruct-to-react signal directly to;
- -said processor.

Considering claim 21, there is no support for:

- -The method of claim 19, wherein;
- -said processor processes a;
- -datum designating;
- -a television channel or;
- -a television program;
- -said method further having one step of;
- -the group consisting of:
- -controlling;
- -a tuner;
- -to tune;
- -a receiver;
- -to receive the television channel;
- -or television;
- -program designated by;

```
-said processed datum;
-controlling:
-a selective transmission device;
-to input to;
-a control signal detector at;
-least some portion of;
-the television channel;
-or television program designated by said;
-processed datum;
-controlling:
-a control signal detector;
-to search for one;
-or more control signals in;
-the television channel;
-or television program designated by;
-said processed datum;
-controlling;
-a selective transmission;
-to input to;
-a computer control signals;
-detected in the television channel;
-or television program designated by;
-said processed datum;
-controlling;
-a computer;
-to respond;
-to control signals detected in the television channel;
-or television program designated by;
-said processed datum;
-controlling;
-a television monitor;
-to display video;
-or audio contained in the television channel;
-or television program designated by;
-said processed datum;
-controlling;
-a video recorder;
-to record;
-or play video;
```

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```
-or audio contained in the television channel;
```

- -or television program designated by;
- -said processed datum;
- -and controlling;
- -a selective transmission device;
- -to communicate to:
- -a video recorder or;
- -a television monitor the television channel;
- -or television program designated by;
- -said processed datum.

Considering claim 22, there is no support for:

- -The method of claim 19, wherein;
- -said processor processes a;
- -datum designating one;
- -or more specific channels of;
- -a multichannel cable;
- -or broadcast;
- -signal;
 - -said method further having one step of;
 - -the group consisting of;
- -controlling;
- -a tuner;
- -to tune;
- -a converter;
- -to receive the one;
- -or more specific channels;
- -designated by;
- -said processed datum;
- -controlling;
- -a selective transmission device;
- -to input to;
- -a control signal detector at;
- -least some portion of;
- -the one;
- -or more specific channels designated by;
- -said processed;
- -datum;
- -controlling;

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-a control signal detector; -to search for one: -or more control signals in; -the one; -or more specific channels designated by; -said processed datum; -controlling; -a selective transmission; -to input to; -a computer control signals detected; -in the one; -or more specific channels designated by; -said processed datum; -controlling; -a computer; -to respond; -to control signals detected in the one; -or more specific channels designated by; -said processed datum; -controlling; -a television monitor; -to display video; -or audio contained in the one; -or more specific channels designated by; -said processed datum; -controlling; -a video recorder; -to record; -or play video; -or audio contained in the one; -or more specific channels designated by; -said processed datum; -and controlling; -a selective transmission device; -to communicate to; -a storage device or; -an output device the one; -or more specific channels designated by; -said processed datum.

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Considering claim 23, there is no support for:

- -A method of;
- -controlling;
- -a receiver station;
- -said receiver;
- -station having;
- -a processor for passing;
- -and executing instructions and;
- -a clock operatively;
- -connected to;
- -said processor for inputting;
- -a timing signal;
- -said method comprising the;
- -steps of:
- -receiving;
- -a broadcast;
- -or cablecast transmission;
- -demodulating;
- -said broadcast;
- -or cablecast transmission:
- -to detect;
- -an information:
- -transmission therein;
- -said information transmission comprising;
- -an instruct signal which is;
- -effective;
- -to coordinate presentation of;
- -said with;
- -a separate predetermined presentation;
- -sequence;
- -detecting;
- -said instruct signal in;
- -said information transmission;
- -and passing said;
- -instruct signal to;
- -said processor;
- -delaying;
- -under processor control;
- -passing;

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```
-said instruct signal to;
-a controllable;
-apparatus;
-passing;
-said instruct signal to;
-said controllable apparatus based on;
-a timing signal;
-controlling said controllable apparatus;
-based on;
```

Considering claim 24, there is no support for:

-the passing of;

-said timing signal.

-said instruct signal.

```
aim 24, there is no support for:

-The method of claim 23, further comprising the steps of:
-detecting;
-a timing signal in;
-said information transmission;
-passing;
-said timing signal to;
-said clock and;
-timing;
-under control of;
-said clock;
```

Considering claim 25, there is no support for:

-said instruct signal based on;

```
-A method of;
-communicating data;
-and update material to;
-one;
-or more mass medium programming receiver stations;
-each of;
-which includes;
-a broadcast;
-or cablecast data receiver;
-a data storage device;
-a control signal detector,
-computer capable of;
```

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```
-processing data;
-said receiver stations adapted;
-to detect;
-and respond;
-to one;
-or more instruct signals;
-and;
-to store data for subsequent processing;
-said method;
-comprising the steps of;
-(1) receiving;
-said data;
-to be transmitted;
-and delivering the data to;
-a transmitter;
-(2) receiving;
-said one;
-or more instruct signals;
-which at the receiver station are;
-effective:
-to coordinate presentation of;
-said data with;
-a separate predetermined presentation sequence;
-(3) transferring;
-said one;
-or more instruct signals to;
-a transmitter and;
-(4) transmitting;
-an information transmission comprising;
-said data and;
-said one;
-or more instruct signals.
```

Considering claim 26, there is no support for:

- -The method of claim 25;
- -wherein some identification data or;
- -said one;
- -or more instruct signals are embedded in;
- -a television signal containing;

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-said data.

Considering claim 27, there is no support for:

- -The method of claim 25, wherein;
- -said step of;
- -transmitting directs;
- -said broadcast;
- -or cablecast transmission to;
- -a plurality of;
- -receiver stations at the same time;
- -and each of:
- -said plurality of;
- -receiver stations receives;
- -or responds to;
- -said one;
- -or more instruct signals concurrently.

Considering claim 28, there is no support for:

- -The method of claim 25, wherein;
- -said step of;
- -transmitting directs;
- -said broadcast;
- -or cablecast transmission to;
- -a plurality of;
- -receiver stations at different times;
- -and each of;
- -said plurality of;
- -receiver stations responds to;
- -said one;
- -or more instruct signals at;
- -a different time.

Considering claim 29, there is no support for:

- -The method of claim 25, further comprising the steps of;
- -receiving;
- -said data at;
- -a receiver in the transmitter station;
- -communicating;
- -said data from;

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```
-said receiver to;
-a memory location;
-and storing;
-said unit at;
-said memory location for;
-a period of;
-time prior;
-to communicating;
-said unit to;
```

Considering claim 30, there is no support for:

```
-A method of; -generating;
```

-a transmitter.

-and delivering;

-an individualized;

-mass medium program presentation;

-comprising mass medium program content;

-and receiver station program information content at;

-a receiver station;

-said receiver station having;

-a receiver for receiving;

-a mass medium program signal;

-a computer for generating;

-and communicating information;

-and one;

-or more output devices operatively connected to;

-said receiver and;

-said computer for delivering to;

-a viewer;

-said presentation, with;

-said computer comprising one;

-or more data storage locations;

-said method comprising the steps of: storing;

-a timing signal specifying;

-a time or;

-a series of:

-times;

-controlling;

```
-said computer;
-a first time based on;
-said timing signal;
-said first step of;
-controlling comprising:
-(1) making;
-a comparison between stored identification data designating;
-a viewer interest;
-and received data including timing data;
-(2) selecting;
-a portion of;
-said received data based on;
-said comparison;
-and (3) storing;
-said selected portion at;
-a one of;
-said one or;
-more storage locations;
-controlling;
-said computer;
-a second time based on;
-said timing signal, said;
-second step of;
-controlling comprising:
-(1) selecting one;
-or more computer programming instructions;
-(2) generating;
-or retrieving receiver station program information content based on;
-said selected portion of;
-data:
-and in accordance with;
-said instructions and;
-(3) preparing;
-to communicate;
-said receiver station program information content;
-controlling;
-said computer;
-a third time based on;
-said timing signal;
```

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```
-said third step of;
```

- -controlling comprising:
- -(1) selecting some of;
- -at least one of;
- -said mass medium program content and;
- -said receiver station program information content;
- -(2) selecting one;
- -or more output devices;
- -(3) communicating;
- -said selected content to;
- -said selected one;
- -or more output devices;
- -thereby presenting to;
- -a subscriber at;
- -a controlled time;
- -an individualized mass medium program;
- -with mass medium program content;
- -and receiver station program information content;
- -said mass medium program content and;
- -said receiver station program information content;
- -being outputted to;
- -said subscriber either as:
- -a combined;
- -or sequential presentation at;
- -an output device;
- -or as parallel presentations at;
- -a plurality of;
- -output devices.

Considering claim 31, there is no support for:

- -An apparatus for coordinating;
- -a programming presentation at;
- -a mass medium program receiver station comprising:
- -a first output device for outputting to;
- -a subscriber at least some of;
- -a mass;
- -medium program;
- -a storage device for storing;
- -a timing control signal;

```
-said timing control;
-signal comprising;
-a datum designating;
-a time;
- (a) to obtain from;
-a remote station;
-some information;
-to be processed for subsequent output in coordination with;
-said mass medium program;
-or;
- (b) to select some information associated with;
-a coordinated programming presentation when received from;
-a remote station;
-a processor operatively connected to;
-said storage device for receiving;
-from:
-said remote station one;
-or more codes;
-or identification data that designate;
-one;
-or more outputs;
-to coordinate with;
-said mass medium program;
-a receiver operatively connected to;
-said processor for receiving a;
-sequence of;
-instructions:
-which are effective;
-to control the presentation of;
-coordinated output;
-a controller;
-or computer operatively connected to;
-said receiver section for controlling;
-or communicating information to;
-an output device and;
-a second output device operatively connected to;
-said controller;
-or computer for presenting;
-said one;
```

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- -or more outputs coordinated with;
- -said mass medium program.

Considering claim 32, there is no support for:

- -A method of;
- -delivering;
- -an individualized mass medium program presentation;
- -comprising mass medium program content;
- -and receiver station program information content at;
- -a receiver station;
- -said receiver station having;
- -a receiver for receiving;
- -a mass medium program signal;
- -a computer for processing;
- -and communicating information;
- -and one;
- -or more output devices operatively connected to;
- -said receiver and;
- -said computer for delivering to;
- -a subscriber;
- -said presentation, with;
- -said computer comprising one;
- -or more data storage locations;
- -said method comprising the steps of:
- -receiving;
- -a plurality of;
- -timing signals or;
- -a timing signal specifying;
- -a series of;
- -times:
- -detecting the presence of;
- -an instruct-to-coordinate signal received from;
- -a remote station;
- -or from;
- -a mass medium program source;
- -said instruct-to-coordinate signal designating;
- -a specific one of;
- -said plurality of;
- -timing signals or;

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```
-a specific one of;
-said series of;
-times;
-selecting at;
-a first controlled time one;
-or more data;
-to serve as;
-a basis for some of;
-said individualized mass medium program presentation;
-and subsequently;
-outputting to:
-said subscriber at:
-a second controlled time in the course of;
-a mass medium program presentation processed information of;
-said selected one:
-or more data:
-at least one of;
-said first controlled time and;
-said second controlled time being in response to;
-said instruct-to-coordinate signal and;
-said processed information of;
-said selected one:
-or more data being outputted either as combined;
-or sequential output with;
-said mass medium program;
-or at:
-a first of;
-said one;
-or more output devices concurrently with;
-said mass medium program outputted at;
-a second of;
-said one;
-or more output devices.
```

Considering claim 33, there is no support for:

- -An apparatus for providing;
- -a coordinated programming presentation at;
- -a mass medium program receiver station comprising:
- -a first receiver for receiving;

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```
-a mass medium program at;
```

- -said mass medium program receiver station;
- -a first output device for outputting;
- -said mass medium program;
- -a first processor for receiving from;
- -a remote station;
- -or from;
- -a mass medium program source;
- -an instruct-to-coordinate signal that designates one;
- -or more data;
- -to select;
- -and input to;
- -a second processor;
- -a second receiver operatively connected to;
- -said first processor for receiving;
- -said one;
- -or more data;
- -said one;
- -or more data being associated with;
- -said coordinated programming presentation;
- -and communicating;
- -said data to:
- -said second processor at;
- -a specific time;
- -said second processor operatively connected to;
- -said second receiver for processing;
- -said designated data;
- -to output coordinated presentation content and;
- -a second output device operatively connected to;
- -said second processor for outputting;
- -said coordinated presentation content.

Considering claim 34, there is no support for:

- -A method of;
- -delivering;
- -an individualized mass medium program presentation at;
- -a receiver station;
- -said receiver station having;
- -at least;

```
-one receiver for receiving mass medium program signals;
-a computer for processing;
-and communicating information;
-and one;
-or more output devices operatively connected to;
-said receiver and;
-said computer for delivering to;
-a subscriber;
-said presentation, with;
-said computer comprising one;
-or more data storage locations;
-said method comprising the steps of:
-receiving data;
-to be processed;
-or communicated in response to;
-an instruct-to-coordinate signal;
-detecting the presence of;
-said instruct-to-coordinate signal received from;
-a remote station;
-or from;
-a mass medium program source;
-said instruct-to-coordinate signal designating one;
-or more mass medium programs;
-to be coordinated;
-selecting in response to;
-said instruct-to-coordinate signal one;
-or more of:
-said received data;
-to serve as:
-a basis for some of:
-said individualized mass medium program presentation;
-and subsequently;
-outputting to;
-said subscriber processed information of;
-said selected one:
-or more data in the course of;
-the presentation of;
-said one;
-or more mass medium programs;
```

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```
-said processed information of;
               -said selected one;
               -or more data being outputted at one of;
               -said one;
               -or more output devices either as;
               -a combined;
               -or sequential output with;
               -said one;
               -or more mass medium programs;
               -or at;
               -a first of;
               -said one;
               -or more output devices concurrently;
               -or sequentially with;
               -said one;
               -or more mass medium programs outputted at;
               -a second of;
               -said one;
               -or more output devices.
Considering claim 35, there is no support for:
              -A method of;
              -providing data of;
              -interest to;
               -a receiver station from;
               -a remote data source;
               -said data of;
              -interest for use at the receiver station in generating;
               -or outputting;
               -a receiver specific datum;
```

-said method comprising the steps of:

-storing data at;

-receiving at;

-a query from;

-transmitting;-said data from;

-said remote data source;

-said remote data source;

-said receiver station;

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```
-said remote data source to;
-said receiver station in response to;
-said step of;
-receiving;
-said query;
-said receiver station selecting;
-and storing some of;
-said transmitted data;
-transmitting from;
-a second remote source to;
-said receiver station;
-a signal;
-which controls;
-said receiver station;
-to select:
-and process;
-an instruct signal;
-which is effective at;
-said receiver station;
-to coordinate two predetermined sequences;
-at least one of;
-which is based on:
-said selected data.
```

Considering claim 36, there is no support for:

- -A method of;
- -communicating subscriber station information from;
- -a subscriber station;
- -to one;
- -or more remote data collection stations;
- -said method comprising the steps of:
- -(1) inputting;
- -a viewer's;
- -or participant's reaction at;
- -said subscriber station;
- -(2) receiving at;
- -said subscriber station;
- -at least one datum that designates;
- -an instruct signal;

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```
-to process or;
-an output;
-to deliver in consequence of;
-subscriber input;
-(3) determining the presence of;
-said subscriber input at;
-said subscriber station by processing;
-said viewer's;
-or participant's reaction;
-(4) processing;
-said information;
-and coordinating two predetermined sequences at;
-said subscriber station in consequence of;
-said step of;
-determining and;
-(5) transferring from;
-said subscriber station to;
-said one;
-or more remote data collection stations;
-an indication confirming execution of;
-said step of;
-processing.
-The method of claim 36, wherein;
```

Considering claim 37, there is no support for:

- -said instruct signal is input by;
- -a subscriber;
- -said method further comprising the steps of:
- -storing;
- -a subscriber instruction;
- -to receive one;
- -or more specific mass medium programs;
- -data;
- -news items;
- -or computer control instructions and;
- -receiving;
- -said one;
- -or more specific mass medium programs;
- -data;

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- -news items;
- -or computer control instructions in accordance with;
- -said instruction.

Considering claim 38, there is no support for:

- -The method of claim 36, wherein;
- -said instruct signal is input by;
- -a subscriber;
- -said method further comprising the steps of:
- -storing;
- -a subscriber instruction;
- -to process;
- -or present one;
- -or more mass medium programs;
- -data:
- -news items;
- -or computer control instructions in;
- -a specific fashion and;
- -processing;
- -or presenting;
- -said one;
- -or more specific mass medium programs;
- -data;
- -news items;
- -or computer control instructions in accordance with;
- -said instruction.

Considering claim 39, there is no support for:

- -The method of claim 36, wherein;
- -said information that designates;
- -an instruct signal;
- -to process or;
- -an output;
- -to deliver is detected in;
- -an information transmission from;
- -a data;
- -or programming source;
- -said method further comprising the steps of:
- -programming;

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- -a processor;
- -to respond;
- -to information communicated from;
- -said data;
- -or programming source;
- -receiving;
- -an information transmission from;
- -said data;
- -or programming source;
- -inputting at least some of;
- -said information transmission to;
- -a control signal detector;
- -detecting data or;
- -an instruct signal in;
- -said information transmission and;
- -passing;
- -said detected data;
- -or instruct signal to;
- -said processor.

Considering claim 40, there is no support for:

- -A method of;
- -controlling;
- -a remote intermediate data transmitter station;
- -to communicate data;
- -to one;
- -or more receiver stations, with;
- -said remote intermediate data transmitter station including;
- -a broadcast;
- -or cablecast transmitter for transmitting one;
- -or more signals;
- -which are effective at;
- -a receiver station;
- -to instruct;
- -a computer;
- -or processor;
- -a plurality of;
- -selective transfer devices each operatively connected to;
- -said broadcast;

```
-or cablecast transmitter for communicating data;
-a data receiver for receiving;
-at least one instruct signal;
-a control signal detector, and;
-a controller;
-or computer capable of;
-controlling one;
-or more of;
-said selective transfer devices;
-and with:
-said remote intermediate data transmitter station adapted;
-to detect the presence of;
-one;
-or more control signals;
-to control the communication of;
-said:
-at least one instruct signal in response to;
-said one:
-or more control signals;
-and:
-to deliver at its broadcast;
-or cablecast transmitter;
-said;
-at least one instruct signal;
-said method comprising the steps of:
-(1) receiving;
-an instruct signal;
-to be transmitted by the remote intermediate data transmitter station;
-and delivering;
-said instruct signal;
-to;
-at least one origination transmitter;
-said instruct signal being effective at;
-a receiver station;
-to coordinate two predetermined sequences;
-(2) receiving one;
-or more control signals;
-which at the remote intermediate data transmitter station operate;
-to control the communication of;
```

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```
-said instruct signal and;
               -(3) transmitting;
               -said one;
               -or more control signals from;
               -said;
               -at least one origination transmitter before;
               -a specific time.
Considering claim 41, there is no support for:
               -The method of claim 40, further comprising the step of;
               -embedding one of;
               -said one;
               -or more control signals in;
               -an information transmission containing;
               -said instruct signal before transmitting;
               -said instruct signal to;
               -said remote transmitter station.
Considering claim 42, there is no support for:
               -The method of claim 40, wherein one of;
               -(1) said specific time is;
               -a scheduled time of;
               -transmitting;
               -(a) said instruct signal;
               -or:
               -(b) some information associated with;
               -said instruct signal from;
               -said remote intermediate data transmitter station;
               -and;
               -(2) said one;
               -or more control signals are effective at;
               -said remote intermediate data transmitter station;
               -to control one:
               -or more of;
```

Considering claim 43, there is no support for:

-said plurality of;

-selective transfer devices at different times.

-A method of;

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- -controlling; -a receiver station including the steps of: -detecting one of;
- -the presence;
- -and absence of;
- -a broadcast;
- -or cablecast control signal;
- -inputting;
- -an instruct-to-react signal to;
- -a processor based on;
- -said step of;
- -detecting;
- -controlling;
- -said processor;
- -to output specific information in response to;
- -said step of;
- -inputting and;
- -coordinating two predetermined sequences on the basis of;
- -information received from;
- -said processor based on;
- -said step of;
- -controlling.

Considering claim 44, there is no support for:

- -The method of claim 43, wherein;
- -a buffer is operatively connected to;
- -said processor for buffering input;
- -said method further comprising the step of:
- -inputting;
- -said instruct-to-react signal directly to;
- -said processor.

Considering claim 45, there is no support for:

- -The method of claim 43, wherein;
- -said processor processes;
- -a datum designating;
- -a television channel or;
- -a television program;
- -or one;

```
-or more specific channels of;
-a multichannel cablecast:
-or broadcast transmission;
-said method further having one step of;
-the group consisting of:
-controlling;
-a tuner;
-to tune;
-a receiver;
-or converter;
-to receive;
-said television channel or;
-said television program or;
-said one;
-or more specific channels designated by;
-said processed datum;
-controlling;
-a selective transfer device;
-to input to;
-a control signal detector at least some portion of;
-said television channel or;
-said television program or;
-said one;
-or more specific channels designated by;
-said processed datum;
-controlling;
-a control signal detector;
-to search for one;
-or more control signals in;
-said television channel or;
-said television program or;
-said one;
-or more specific channels designated by;
-said processed datum;
-controlling;
-a selective transfer device;
-to input to;
-a computer control signals detected in;
-said television channel or;
```

```
-said television program or;
-said one;
-or more specific channels designated by;
-said processed datum;
-controlling;
-a computer;
-to respond;
-to control signals detected in;
-said television channel or;
-said television program or;
-said one;
-or more specific channels designated by;
-said processed datum controlling;
-a television monitor;
-to display video;
-or audio contained in;
-said television channel or:
-said television program or;
-said one;
-or more specific channels designated by;
-said processed datum;
-controlling;
-a video recorder;
-to record;
-or play video;
-or audio contained in;
-said television channel or;
-said television program or;
-said one;
-or more specific channels designated by;
-said processed datum;
-and controlling;
-a selective transfer device;
-to communicate to;
-a video recorder or;
-a television monitor;
-said television channel or;
-said television program or;
-said one;
```

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-or more specific channels designated by; -said processed datum.

Considering claim 46, there is no support for:

- -A method of:
- -controlling;
- -a receiver station;
- -said receiver station having;
- -a processor for passing;
- -and executing instructions and;
- -a clock operatively connected to;
- -said processor for inputting;
- -a timing signal;
- -said method comprising the steps of:
- -receiving;
- -a broadcast;
- -or cablecast transmission;
- -demodulating;
- -said broadcast;
- -or cablecast transmission;
- -to detect;
- -an information transmission thereon;
- -said information transmission comprising;
- -an instruct signal;
- -which is effective;
- -to coordinate two predetermined sequences;
- -detecting;
- -said instruct signal on;
- -said information transmission;
- -and passing;
- -said instruct signal to;
- -said processor;
- -delaying;
- -under processor control;
- -the passing of;
- -said instruct signal to;
- -a controllable apparatus;
- -passing;
- -said instruct signal to;

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```
-said controllable apparatus on the basis of;
               -a timing signal and;
               -controlling;
               -said controllable apparatus based on;
               -said instruct signal.
Considering claim 47, there is no support for:
               -A method of;
               -controlling;
               -at least one of;
               -a plurality of;
               -receiver stations each of;
               -which includes;
               -a broadcast;
               -or cablecast receiver;
               -a processor;
               -a signal detector;
               -said signal detector adapted;
               -to detect signals within;
               -a broadcast:
               -or cablecast transmission, and;
               -said processor programmed;
               -to respond;
               -to detected signals communicated from;
               -said detector, and;
               -said method comprising the steps of:
               -(1) receiving at;
               -a broadcast;
               -or cablecast transmitter station;
               -a first instruct signal;
               -which is effective at;
               -said:
               -at least one of;
               -a plurality of;
               -receiver stations;
```

-to coordinate two predetermined sequences;

-(2) transferring;

-a first transmitter;

-said first instruct signal to;

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```
-(3) receiving one;
-or more first control signals at;
-said transmitter station;
-said control signals addressing;
-said first instruct signal to;
-said processor of;
-at least one specific receiver station and;
-(4) transferring;
-said one;
-or more first control signals;
-to one of;
-said first transmitter and;
-a second transmitter;
-said transmitter station broadcasting;
-or cablecasting;
-said first instruct signal and;
-said one;
-or more first control signals to;
-said plurality of;
-receiver stations.
```

Considering claim 48, there is no support for:

- -The method of claim 47, wherein;
- -at least one of;
- -said first instruct signal and;
- -said one;
- -or more first control signals are embedded in the non-visible portion of;
- -a television signal.

Considering claim 49, there is no support for:

- -The method of claim 47, wherein;
- -a switch communicates signals selectively between;
- -a receiver;
- -and one of;
- -a memory;
- -or recorder and;
- -said transmitter;
- -said method further comprising one from the group consisting of:
- -detecting;

```
-a second control signal;
-which is effective at the transmitter;
-station;
-to cause communication;
-determining;
-a specific signal source from which;
-to communicate at least;
-one of:
-said instruct signal and;
-said first control signals to;
-said transmitter;
-controlling;
-said switch;
-to communicate;
-at least one of;
-said instruct signal;
-and:
-said first control signals to;
-said transmitter in response to;
-a second control signal;
-which is effective at the transmitter station;
-to instruct communication;
-controlling;
-said switch;
-to communicate;
-at least one of;
-said instruct signal;
-and;
-said first control signals from;
-a selected signal source and;
-controlling;
-said switch;
-to communicate to;
-said memory;
-or recorder at;
-least one of:
-said instruct signal and;
-said first control signals.
```

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Considering claim 50, there is no support for:

- -The method of claim 47, wherein;
- -a controller controls;
- -a switch;
- -to communicate to;
- -said transmitter;
- -a selected signal;
- -further comprising one from the group consisting of:
- -detecting;
- -a second control signal;
- -which is effective at the transmitter station;
- -to cause transmission;
- -inputting to;
- -said controller;
- -a second control signal;
- -which is effective;
- -to control:
- -said switch;
- -controlling;
- -said switch;
- -to communicate;
- -at least one of;
- -said instruct signal and;
- -said first control signals according to;
- -a transmission schedule;
- -controlling;
- -said switch;
- -to communicate from;
- -a specific one of;
- -a plurality of;
- -signal sources and;
- -controlling;
- -said switch;
- -to communicate;
- -at least one of;
- -said instruct and;
- -said first control signals to;
- -a selected one of;
- -a plurality of;

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-transmitters.

Considering claim 51, there is no support for:

- -The method of claim 47, further comprising;
- -one from the group consisting of:
- -transmitting to;
- -a receiver station one;
- -or more data that designate;
- -a time or;
- -a channel of;
- -transmission of;
- -said instruct signal and;
- -transmitting to;
- -a receiver station one;
- -or more data that specify the title of;
- -or some subject matter contained in;
- -a unit of:
- -mass medium programming;
- -or data associated with;
- -said instruct signal and;
- -transmitting to;
- -a receiver station;
- -a second control signal;
- -to cause;
- -said receiver station;
- -to tune to;
- -a broadcast;
- -or cablecast transmission containing;
- -a specific instruct signal.

Considering claim 52, there is no support for:

- -The method of;
- -claim 47, wherein;
- -said one;
- -or more first control signals further comprise downloadable executable code

targeted to;

- -said processor at one;
- -or more of;
- -said plurality of;

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```
-receiver stations;
               -said downloadable executable code programming the way;
               -or method in which;
               -said:
               -at least one processor responds to;
               -said instruct signal.
Considering claim 53, there is no support for:
               -The method of;
               -claim 47, wherein;
               -at least one receiver station is adapted;
               -to detect the presence of;
               -said one;
               -or more first control signals;
               -or programmed;
               -to respond to;
               -said instruct signal on the basis of;
               -the location of;
               -a signal in;
               -an information transmission;
               -said method further comprising the step of;
```

Considering claim 54, there is no support for:

-said location.

- -The method of;
- -claim 43, wherein;

-causing at least some of;-said control signal;-or instruct signal;-to be transmitted in;

- -a first of;
- -said two predetermined sequences includes;
- -a sequence of;
- -mass medium program content and;
- -a second of;
- -said predetermined sequences includes;
- -a series of;
- -computer outputs from;
- -a receiver station computer.

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Considering claim 55, there is no support for:

- -The method of;
- -claim 54, wherein;
- -an instruct-to-coordinate signal causes;
- -said receiver station;
- -to commence outputting;
- -said sequence of;
- -mass medium program content.

Considering claim 56, there is no support for:

- -The method of;
- -claim 55, wherein;
- -a third predetermined sequence includes;
- -a series of;
- -instructions and;
- -said instruct-to-coordinate signal causes;
- -said receiver station;
- -to commence inputting;
- -said instructions to;
- -said computer.

Considering claim 57, there is no support for:

- -The method of;
- -claim 54, wherein;
- -an instruct-to-coordinate signal causes;
- -said receiver station;
- -to generate at least some of;
- -two;
- -or more images from;
- -said series of;
- -computer outputs.

Considering claim 58, there is no support for:

- -The method of;
- -claim 54, wherein;
- -an instruct-to-coordinate signal causes;
- -said computer;
- -to output at least;
- -a first of;

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- -said series of:
- -computer outputs.

Considering claim 59, there is no support for:

- -The method of;
- -claim 54, wherein;
- -said sequence of;
- -mass medium program content includes only some of;
- -a television program and;
- -said series of;
- -computer outputs includes;
- -a balance of;
- -said television program.

Considering claim 60, there is no support for:

- -The method of;
- -claim 59, wherein;
- -said only some of;
- -said television program includes only some of;
- -a series of;
- -video images of;
- -said television program, and;
- -said series of;
- -computer outputs includes the balance of;
- -said series of;
- -video images.

Considering claim 61, there is no support for:

- -The method of;
- -claim 59, wherein;
- -said series of;
- -computer outputs includes;
- -a receiver specific datum and;
- -said receiver station presents;
- -an individualized television program.

Considering claim 62, there is no support for:

- -The method of;
- -claim 59, wherein;

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- -said sequence of;
- -mass medium program content is received at;
- -said receiver station in;
- -a television signal;
- -said method further comprising the steps of:
- -detecting;
- -an instruct-to-generate signal in;
- -said television signal and;
- -generating at least some of;
- -said series of;
- -computer outputs in response to;
- -said instruct-to-generate signal.

Considering claim 63, there is no support for:

- -The method of:
- -claim 56, wherein;
- -said third predetermined sequence is detected in;
- -an analog television signal.

Considering claim 64, there is no support for:

- -The method of;
- -claim 56, wherein;
- -said third predetermined sequence is detected in;
- -a digital television signal.

Considering claim 65, there is no support for:

- -The method of;
- -claim 46, wherein;
- -a first of;
- -said predetermined sequences includes;
- -a sequence of;
- -mass medium program content and;
- -a second of;
- -said predetermined sequences includes;
- -a series of;
- -a computer outputs from;
- -a receiver station computer.

Considering claim 66, there is no support for:

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- -The method of;
- -claim 65, wherein;
- -said instruct signal causes;
- -said receiver station;
- -to commence outputting;
- -said sequence of;
- -mass medium program content.

Considering claim 67, there is no support for:

- -The method of;
- -claim 66, wherein;
- -a third predetermined sequence includes;
- -a series of;
- -instructions and;
- -said instruct signal causes;
- -said receiver station;
- -to commence inputting;
- -said instructions to;
- -said computer.

Considering claim 68, there is no support for:

- -The method of;
- -claim 65, wherein;
- -said instruct signal causes;
- -said receiver station;
- -to generate at least some of;
- -two;
- -or more images of;
- -said series of;
- -computer outputs.

Considering claim 69, there is no support for:

- -The method of;
- -claim 65, wherein;
- -said instruct signal causes;
- -said computer;
- -to output at least;
- -a first of;
- -said series of;

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-computer outputs.

Considering claim 70, there is no support for:

- -The method of;
- -claim 65, wherein;
- -said sequence of;
- -mass medium program content includes only some of;
- -a television program and;
- -said series of;
- -computer outputs includes;
- -a balance of;
- -said television program.

Considering claim 71, there is no support for:

- -The method of;
- -claim 70, wherein;
- -said only some of;
- -said television program includes only some of;
- -a series of;
- -video images of;
- -said television program, and;
- -said series of;
- -computer outputs includes the balance of;
- -said series of;
- -video images.

Considering claim 72, there is no support for:

- -The method of;
- -claim 70, wherein;
- -said series of;
- -computer outputs includes;
- -a receiver specific datum and;
- -said receiver station presents;
- -an individualized television program.

Considering claim 73, there is no support for:

- -The method of;
- -claim 70, wherein;
- -said sequence of;

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```
-mass medium program content is received at;
```

- -said receiver station in;
- -a television signal;
- -said method further comprising the steps of:
- -detecting;
- -an instruct-to-generate signal in;
- -said television signal and;
- -generating at least some of;
- -said series of;
- -computer outputs in;
- -response to;
- -said instruct-to-generate signal.

Considering claim 74, there is no support for:

- -The method of;
- -claim 67, wherein;
- -said third predetermined sequence is detected in;
- -an analog television signal.

Considering claim 75, there is no support for:

- -The method of;
- -claim 67, wherein;
- -said third predetermined sequence is detected in;
- -a television signal.

Considering claim 76, there is no support for:

- -The method of;
- -claim 47, wherein;
- -a first of;
- -said predetermined sequences coordinated at;
- -said;
- -at least one receiver station includes;
- -a sequence of;
- -mass medium program content and;
- -a second of;
- -said predetermined sequences includes;
- -a series of;
- -computer outputs.

```
Considering claim 77, there is no support for:
               -The method of;
               -claim 76, further comprising the step of;
               -transmitting;
               -said sequence of;
               -mass medium program content to;
               -at least one of;
               -a plurality of;
               -receiver stations;
               -The method of;
               -claim 77, further comprising the step of;
               -embedding;
               -said first instruct signal in;
               -an information transmission containing;
               -said sequence of;
               -mass medium program content.
Considering claim 79, there is no support for:
               -The method of;
               -claim 78, wherein;
               -said first instruct signal is embedded in;
               -said information transmission before at least some of;
               -said sequence of;
               -mass medium program content is transmitted to;
               -said;
               -at least one of;
               -a plurality of;
               -receiver stations.
Considering claim 80, there is no support for:
               -The method of;
               -claim 76, wherein;
               -said first instruct signal causes;
               -said receiver station;
               -to commence outputting at least some portion of;
               -one of;
               -said sequence of;
```

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```
-mass medium program content and;
-said sequence of;
-computer outputs;
-said method further comprising the step of;
-transmitting;
-a second instruct signal;
-which operates at;
-said receiver station;
-to deliver at;
-an output device at least some of;
-said series of;
```

Considering claim 81, there is no support for:

-computer outputs.

- -The method of;
- -claim 80, further comprising the step of;
- -embedding;
- -said second instruct signal in;
- -a signal containing at least some of;
- -said first predetermined sequence and;
- -said second predetermined sequence before transmitting;
- -said second instruct signal.

Considering claim 82, there is no support for:

- -The method of;
- -81, wherein;
- -said second instruct signal operates at;
- -said:
- -at least one of;
- -said plurality of;
- -receiver stations;
- -to generate at least some of;
- -said series of;
- -computer outputs.

Considering claim 83, there is no support for:

- -A method at;
- -a receiver station of;
- -coordinating the processing of;

```
-data;
-and television programming;
-to present;
-a user specific output;
-said method comprising the steps of:
-selecting;
-a datum of;
-interest;
-storing the selected datum of;
-interest;
-receiving;
-a plurality of;
-units of;
-television programming at the receiver station;
-selecting one of;
-the plurality of;
-received units of;
-television programming;
-outputting the selected unit of;
-television programming at;
-at least one output device at the receiver station;
-receiving;
-a plurality of;
-control signals;
-generating;
-a user specific display based on the stored datum of;
-interest;
-outputting the user specific display;
-to the;
-at least one output device;
-to present the user specific output comprising the outputted unit of;
-television program;
-and the outputted user specific display;
-at least one of;
-said steps of;
-generating;
-and outputting the user specific display being performed in response;
-to;
-at least one of;
```

-an output at the;

```
-said received plurality of;
               -control signals.
Considering claim 84, there is no support for:
               -A method of;
               -coordinating the output of;
               -a user specific output at;
               -a receiver station;
               -said receiver station having;
               -a computer for generating;
               -a user specific output;
               -a detector operatively connected to;
               -said computer;
               -and;
               -at least one output device;
               -said method comprising the steps of:
               -selecting;
               -at least one datum of;
               -interest;
               -storing the selected;
               -at least one datum of;
               -interest;
               -receiving;
               -a digital information transmission containing;
               -(i) programming;
               -to be outputted in;
               -a television presentation;
               -and (ii) a control signal;
               -detecting the control signal in the digital information transmission;
               -generating the user specific output based on;
               -said stored selected;
               -at least one datum;
               -outputting;
               -to the;
               -at least one output device the generated user specific output based on;
               -said step of;
               -detecting;
               -to present;
```

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-at least one output device including the user specific output.

Considering claim 85, there is no support for:

- -The method of;
- -claim 84, wherein;
- -said step of;
- -receiving comprises the step of;
- -receiving television programming.

Considering claim 86, there is no support for:

- -The method of;
- -claim 84;
- -said;
- -at least one output device includes;
- -a display device;
- -said method further comprising the step of;
- -displaying;
- -the received;
- -digital;
- -information transmission containing;
- -(i) programming;
- -to be outputted in;
- -a television presentation at;
- -the display device.

Considering claim 87, there is no support for:

- -The method of;
- -claim 86 wherein;
- -said step of;
- -generating comprises the step of;
- -generating;
- -a user specific visual display based on;
- -said stored selected;
- -at least one datum.

Considering claim 88, there is no support for:

- -The method of;
- -claim 87 wherein;
- -said step of;

```
-outputting comprises the step of;
               -outputting;
               -to the display device the generated user specific visual display in response to;
               -said step of;
               -detecting;
               -to present;
               -an output on the display device including the programming;
               -to be outputted in;
               -a television presentation;
               -and the generated user specific visual display;
               -said programming;
               -to be outputted in;
               -a television presentation and;
               -said generated display being outputted one of;
               -sequentially;
               -and in combination.
Considering claim 89, there is no support for:
               -A method at:
               -a receiver station of;
               -coordinating the processing of;
               -data:
               -to present;
               -a user specific output;
               -said method comprising the steps of:
               -selecting;
               -a datum of;
               -interest:
               -said step of;
               -selecting comprising:
               -(a) storing at the receiver station;
               -an identification signal identifying the datum of;
               -interest:
               -(b) receiving from;
               -a remote data source;
               -a plurality of;
               -data including the datum of;
               -interest;
               -each of;
```

```
-said plurality of;
-data comprising;
-an identification signal and;
-an information signal;
-(c) comparing the identification signal of;
-the datum of;
-interest:
-to the identification signals of;
-each of;
-the received data;
-(d) selecting the datum of;
-interest from the plurality of;
-received data based on;
-said step of;
-comparing;
-storing the selected datum of;
-interest;
-receiving;
-a plurality of;
-units of;
-television programming at the receiver station;
-selecting one of;
-the plurality of;
-received units of;
-programming;
-outputting the selected unit of;
-programming on;
-an output device at the receiver station;
-receiving;
-a plurality of;
-control signals;
-generating;
-a user specific display based on at least the information signal of;
-the stored datum of;
-interest;
-outputting the user specific display;
-to the output device;
-to present the user specific output comprising the outputted unit of;
-television program;
```

```
-and the outputted user specific display;
               -at least one of;
               -said steps of;
               -generating;
               -and outputting the display being performed in response;
               -at least one of;
               -said received control signals.
Considering claim 90, there is no support for:
               -A method at;
               -a receiver station of;
               -coordinating the processing of;
               -data to;
               -present;
               -a user specific output;
               -said method comprising the steps of: receiving data in;
               -at least one information channel;
               -selecting at least;
               -a portion of;
               -said received data that is of;
               -interest:
               -to the user;
               -storing;
               -said selected at least;
               -said portion of;
               -said data;
               -receiving television programming and;
               -a control signal in;
               -said:
               -at least one information channel;
               -detecting the control signal in the;
               -at least one information channel;
               -generating;
               -a user specific graphic based on;
               -said stored selected at least;
               -said portion of;
               -said data;
               -outputting to;
```

-receiving;

```
-a monitor the generated user specific graphic based on;
               -said step of:
               -detecting;
               -to present;
               -a visual display on the monitor comprising the user specific graphic.
Considering claim 91, there is no support for:
               -The method of;
               -claim 90 wherein;
               -at least one of;
               -said steps of;
               -receiving comprises receiving;
               -at least one information channel;
               -said:
               -at least one information channel comprising;
               -a digital information transmission.
Considering claim 92, there is no support for:
               -The method of:
               -claim 90 wherein;
               -at least one of;
               -said steps of;
               -receiving comprises the step of;
               -automatically querying;
               -a data service;
               -to obtain;
               -at least one of;
               -said data;
               -said television programming and;
               -said control signal.
Considering claim 93, there is no support for:
               -The method of;
               -claim 90 wherein;
               -at least one of:
               -said steps of;
               -receiving comprises the step of;
```

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```
-a first information transmission from one of;
```

- -a broadcast and;
- -a cablecast television transmission source;
- -said first information transmission comprising;
- -a digital information channel.

Considering claim 94, there is no support for:

- -A method at;
- -a receiver station of;
- -coordinating the processing of;
- -data;
- -to present;
- -a user specific output;
- -said method comprising the steps of:
- -storing identification information identifying data of;
- -interest;
- -to the user;
- -receiving data over;
- -an information channel;
- -comparing the received data;
- -to the stored identification information;
- -selecting;
- -based on;
- -said step of;
- -comparing;
- -the data of;
- -interest;
- -to the user:
- -from the received data;
- -storing;
- -said selected data;
- -receiving;
- -an information transmission comprising television programming and;
- -a control signal;
- -detecting the control signal in the information transmission;
- -generating;
- -a user specific graphic based on;
- -said stored selected data;
- -outputting to;

```
-a monitor the generated user specific graphic based on;
               -said step of:
               -detecting;
               -to present;
               -a visual display on the monitor including the user specific graphic.
Considering claim 95, there is no support for:
               -A method at;
               -a receiver station of;
               -coordinating the processing of;
               -data;
               -to present;
               -a user specific output;
               -said method comprising the steps of:
               -receiving one of;
               -a television broadcast and;
               -a television cablecast transmission;
               -said transmission comprising television programming;
               -data;
               -and;
               -a control signal;
               -detecting the data in the transmission;
               -selecting at least;
               -a portion of;
               -said detected data that is of;
               -interest;
               -to the user;
               -storing;
               -said selected data;
               -detecting the control signal in the transmission;
               -generating;
               -a user specific graphic based on;
               -said stored selected data;
               -outputting to;
               -a monitor the generated user specific graphic based on;
               -said step of;
               -detecting;
               -to present;
               -a visual display on the monitor including the user specific graphic.
```

-detecting;

```
Considering claim 96, there is no support for:
               -A method at:
               -a receiver station of;
               -coordinating the processing of;
               -data;
               -to present;
               -a user specific output;
               -said method comprising the steps of:
               -storing identification information identifying data of;
               -interest:
               -to the user;
               -receiving;
               -a plurality of;
               -information channels;
               -scanning each of;
               -said channels;
               -identifying one of;
               -said plurality of;
               -information channels containing the data of;
               -interest;
               -to the user;
               -tuning;
               -to the identified channel;
               -detecting the data of;
               -interest received on the identified channel;
               -storing;
               -said detected data of;
               -interest;
               -receiving;
               -at least one information transmission containing television programming and;
               -a control signal;
               -detecting the control signal in the information transmission;
               -generating;
               -a user specific graphic based on;
               -said stored selected data;
               -outputting to;
               -a monitor the generated user specific graphic based on;
               -said step of;
```

-a control signal;

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```
-to present;
               -a visual display on the monitor including the user specific graphic.
Considering claim 97, there is no support for:
               -A method at;
               -a receiver station of;
               -coordinating the processing of;
               -data;
               -to present;
               -a user specific output;
               -said method comprising the steps of:
               -storing identification information identifying data of;
               -interest;
               -to the user;
               -receiving;
               -a plurality of;
               -information channels;
               -at least one of;
               -said channels containing data;
               -scanning each of;
               -said plurality of;
               -information channels;
               -comparing the identification information;
               -to the data on each;
               -said scanned channel;
               -identifying the channel containing the data of;
               -interest based on;
               -said step of;
               -comparing;
               -tuning;
               -to the identified channel;
               -detecting the data of;
               -interest received on the identified channel;
               -storing;
               -said detected data of;
               -interest;
               -receiving;
```

-at least one information transmission containing television programming and;

```
-detecting the control signal in the;
               -at least one information transmission;
               -generating;
               -a user specific graphic based on;
               -said stored selected data;
               -outputting to;
               -a display device at the receiver station;
               -the generated user specific graphic based on;
               -said step of;
               -detecting.
Considering claim 98, there is no support for:
               -A method at;
               -a receiver station of;
               -coordinating the processing of;
               -data;
               -and television programming;
               -to present;
               -a user specific output;
               -said method comprising the steps of:
               -selecting;
               -a datum of;
               -interest;
               -said step of;
               -selecting comprising:
               -(a) storing;
               -an identification signal at the receiver station identifying the datum of;
               -interest;
               -(b) querying;
               -a remote data source;
               -(c) receiving;
               -in response to;
               -said step of;
               -querying;
               -a plurality of;
               -data including the datum of;
               -interest from the remote data source;
               -each of;
               -said plurality of;
```

```
-data comprising;
-an identification signal and;
-an information signal;
-(d) selecting the datum of;
-interest from the plurality of;
-received data;
-storing the selected datum of;
-interest;
-receiving;
-a plurality of;
-units of;
-television programming at the receiver station;
-selecting one of;
-the received plurality of;
-units of:
-television programming;
-outputting the selected unit of;
-television programming on;
-an output device at the receiver station;
-receiving;
-a plurality of;
-control signals;
-generating;
-a user specific display based on at least the information signal of;
-the stored datum of;
-interest;
-outputting the user specific display;
-to the output device;
-to present the user specific output comprising the outputted unit of;
-television programming;
-and the outputted user specific display;
-at least one of;
-said steps of;
-generating;
-and outputting the user specific display being performed based on;
-at least one of;
-said received plurality of;
-control signals.
```

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Considering claim 99, there is no support for:

- -A method of;
- -providing data of;
- -interest to;
- -a receiver station from;
- -a remote data source;
- -said data of;
- -interest for use at the receiver station in one of;
- -generating;
- -and outputting;
- -at least one receiver specific datum;
- -said method comprising the steps of;
- -storing data at;
- -said remote data source;
- -receiving at;
- -said remote data source;
- -a query from;
- -said receiver station;
- -transmitting;
- -said data from;
- -said remote data source to;
- -said receiver station in response to;
- -said step of;
- -receiving;
- -said query;
- -said receiver station selecting;
- -and storing at least;
- -a portion of;
- -said transmitted data;
- -transmitting from;
- -a second remote source to;
- -said receiver station;
- -a signal;
- -which controls;
- -said receiver station;
- -to select;
- -and process;
- -an instruct signal;
- -which is effective at;

```
-said receiver station;
               -to coordinate data processing with;
               -at least one of;
               -communication;
               -and presentation of;
               -television programming.
Considering claim 100, there is no support for:
               -A method of;
               -communicating subscriber station information from;
               -a subscriber station;
               -to;
               -at least one remote data collection station;
               -said method comprising the steps of;
               -inputting;
               -a subscriber reaction at;
               -said subscriber station;
               -receiving at;
               -said subscriber station information that designates;
               -at least one of;
               -an instruct signal;
               -to process and;
               -an output;
               -to deliver in consequence of;
               -subscriber input;
               -determining the presence of;
               -said subscriber input at;
               -said subscriber station by processing;
               -said subscriber reaction;
               -processing;
               -an instruct signal;
               -which is effective;
               -to coordinate data processing with;
               -at least one of:
               -communication;
               -and presentation of;
               -television programming at;
               -said subscriber station in consequence of;
               -said step of;
```

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```
-determining and;
               -transferring from;
               -said subscriber station;
               -to:
               -at least one remote data collection station;
               -at least one datum;
               -at least one of;
               -confirming delivery of;
               -said instruct signal from;
               -said step of;
               -processing;
               -and confirming delivery of;
               -said effect from;
               -said step of;
               -processing.
Considering claim 101, there is no support for:
               -The method of;
               -claim 100, wherein;
               -said instruct signal is input by;
               -a subscriber;
               -said method further comprising the steps of;
               -storing:
               -a subscriber instruction;
               -to receive;
               -at least one of;
               -specific mass medium programs;
               -data:
               -news items;
               -and computer control instructions;
               -and receiving;
               -at least one of;
               -specific mass medium programs;
               -data:
               -news items;
               -and computer control instructions in accordance with;
               -said instruction.
```

Considering claim 102, there is no support for:

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```
-The method of;
-claim 100, wherein;
-said instruct signal is input by;
-a subscriber;
-said method further comprising the steps of;
-storing;
-a subscriber instruction;
-to process;
-or present;
-at least one mass medium programs;
-data;
-news items;
-or computer control instructions in;
-a specific fashion;
-and processing;
-or presenting;
-at least one of;
-specific mass medium programs;
-data;
-news items;
-and computer control instructions in accordance with;
-said instruction.
```

Considering claim 103, there is no support for:

- -The method of;
- -claim 100, wherein;
- -said information that designates one of;
- -an instruct signal;
- -to process and;
- -an output;
- -to deliver in consequence of;
- -subscriber input is detected in;
- -an information transmission from one of;
- -a data source and;
- -a programming source;
- -said method further comprising the steps of;
- -programming;
- -a processor;
- -to respond;

```
-to information communicated from;
               -said one of:
               -a data source and;
               -a programming source;
               -receiving;
               -an information transmission from;
               -said one of:
               -a data source and;
               -a programming source;
               -inputting at least;
               -a portion of;
               -said information transmission to;
               -a control signal detector;
               -detecting one of;
               -data and;
               -an instruct signal in;
               -said information transmission;
               -and passing;
               -said detected one of;
               -data and:
               -an instruct signal to;
               -said processor.
Considering claim 104, there is no support for:
              -A method of;
               -controlling:
               -a remote intermediate television transmitter station;
               -to communicate television program material;
               -at least one receiver station;
               -said remote intermediate television transmitter station including one of;
               -a broadcast and;
               -a cablecast transmitter;
               -a plurality of;
               -selective transfer devices each operatively connected to;
               -said one of;
               -a broadcast and;
               -a cablecast transmitter;
               -a receiver for receiving television programming from;
```

```
-at least one origination transmitter station;
-a control signal detector;
-and one of;
-a controller and;
-a computer capable of;
-controlling;
-at least one of;
-said plurality of;
-selective transfer devices;
-and with:
-said remote television transmitter station adapted;
-to detect the presence of;
-at least one control signal;
-and;
-to deliver at;
-said one of;
-a broadcast and;
-a cablecast transmitter;
-said television programming;
-said method comprising the steps of;
-receiving;
-said television programming at;
-said;
-at least one origination transmitter station;
-and delivering;
-said television programming;
-to;
-at least one origination transmitter;
-said television programming;
-to have;
-at least one associated instruct signal;
-which is effective at the;
-at least one receiver station;
-to coordinate data processing with;
-at least one of;
-communication;
-and presentation of;
-said television programming;
-receiving;
```

```
-at least one control signal;
               -which at the remote intermediate television transmitter station operates;
               -to control the communication of;
               -at least one of:
               -said television programming and;
               -said;
               -at least one instruct signal;
               -and transmitting;
               -said;
               -at least one control signal from;
               -said:
               -at least one origination transmitter before;
               -a specific time.
Considering claim 105, there is no support for:
               -The method of;
               -claim 104, wherein;
               -said;
               -at least one control signal includes one of;
               -a code and;
               -a datum;
               -which operates at the remote intermediate television transmitter station;
               -to identify;
               -said;
               -at least one of;
               -said television programming and;
               -said;
               -at least one instruct signal;
               -said method further comprising the step of;
               -transmitting;
               -a schedule;
               -which operates at the remote intermediate television transmitter station;
               -to communicate;
               -said;
               -at least one of;
               -said television programming and;
               -said;
               -at least one instruct signal to;
               -said:
```

-is effective;

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```
-at least one origination transmitter at;
               -said specific time.
Considering claim 106, there is no support for:
               -The method of:
               -claim 104, further comprising the step of;
               -embedding;
               -a specific one of;
               -said;
               -at least one control signal in;
               -an information transmission containing;
               -said:
               -at least one of;
               -said television programming and;
               -said;
               -at least one instruct signal before transmitting;
               -said;
               -at least one of;
               -television programming and;
               -said:
               -at least one instruct signal to;
               -said remote intermediate television transmitter station.
Considering claim 107, there is no support for:
               -The method of;
               -claim 104, wherein one of;
               -(i) said specific time is;
               -a scheduled time of;
               -transmitting;
               -said;
               -at least one of;
               -television programming and;
               -said;
               -at least one instruct signal at;
               -said remote intermediate television transmitter station;
               -and (ii) said at least;
               -one control signal;
```

-at the remote intermediate television transmitter station;

-to control;-at least one of;

-The method of;

```
-said plurality of;
               -selective transfer devices at different times.
Considering claim 108, there is no support for:
               -A method of;
               -controlling;
               -a receiver station including the steps of: detecting one of;
               -the presence;
               -and absence of;
               -one of;
               -a broadcast and;
               -a cablecast control signal;
               -inputting;
               -an instruct-to-react signal to;
               -a processor based on;
               -said step of;
               -detecting one of;
               -the presence;
               -and absence of;
               -a control signal;
               -controlling;
               -said processor;
               -to output specific information in response to;
               -said step of;
               -inputting;
               -an instruct-to-react signal;
               -and coordinating data processing with communication;
               -or presentation of;
               -television programming on the basis of;
               -information received from;
               -said processor based on;
               -said step of;
               -controlling;
               -a processor.
Considering claim 109, there is no support for:
```

```
-claim 108, wherein;
-a buffer is operatively connected to:
-said processor for buffering input;
-said method further comprising the step of;
```

- -bypassing;
- -said buffer;
- -and inputting;
- -said instruct-to-react signal directly to;
- -said processor.

Considering claim 110, there is no support for:

- -The method of:
- -claim 108, wherein;
- -said processor processes;
- -a datum designating one of;
- -a television channel and;
- -a television program;
- -said method further comprising the step of;
- -controlling;
- -a tuner;
- -to tune;
- -a receiver:
- -to receive the television channel;
- -or television program designated by;
- -said processed datum.

Considering claim 111, there is no support for:

- -The method of;
- -claim 108, wherein;
- -said processor processes;
- -a datum designating;
- -at least one specific channel or;
- -one of;
- -a multichannel cable signal and;
- -a multichannel broadcast signal;
- -said method further comprising the step of;
- -controlling;
- -a tuner;
- -to tune;

```
-a converter;
```

- -to receive the;
- -at least one specific channel designated by;
- -said processed datum.

Considering claim 112, there is no support for:

- -A method of;
- -controlling;
- -a receiver station;
- -said receiver station having;
- -a processor for passing;
- -and executing instructions and;
- -a clock operatively connected to;
- -said processor for inputting;
- -a timing signal;
- -said method comprising the steps of;
- -receiving one of;
- -a broadcast and:
- -a cablecast transmission;
- -demodulating;
- -said one of;
- -a broadcast and;
- -a cablecast transmission;
- -to detect;
- -an information transmission thereon;
- -said information transmission comprising;
- -an instruct signal;
- -which is effective;
- -to coordinate data processing with;
- -at least one of;
- -communication;
- -and presentation of;
- -television programming;
- -detecting;
- -said instruct signal on;
- -said information transmission;
- -and passing;
- -said instruct signal to;
- -said processor;

```
-delaying;
               -under processor control;
               -the passing of;
               -said instruct signal to;
               -a controllable apparatus;
               -passing;
               -said instruct signal to;
               -said controllable apparatus on the basis of;
               -said timing signal;
               -and controlling;
               -said controllable apparatus based on;
               -said instruct signal.
Considering claim 113, there is no support for:
               -A method of;
               -controlling;
               -at least one of;
               -a plurality of;
               -receiver stations each of;
               -which includes one of;
               -a broadcast and;
               -a cablecast mass medium programming receiver;
               -at least one output device;
               -a control signal detector;
               -at least one processor capable of;
               -responding to;
               -an instruct signal;
               -and with each;
               -said;
               -at least one of;
               -said plurality of;
               -receiver stations adapted;
               -to detect;
               -and respond;
               -to:
               -at least one instruct signal;
               -said method comprising the steps of:
               -receiving at one of;
               -a broadcast and;
```

```
-a cablecast transmitter station;
                -an instruct signal;
                -which is effective at;
                -said:
                -at least one of;
                -said plurality of;
                -receiver stations;
                -to coordinate data processing with;
                -at least one of;
                -communication;
                -and presentation of;
                -television programming;
               -and delivering the instruct signal to;
                -a transmitter;
                -receiving at;
                -said transmitter station;
                -at least one control signal;
                -which at the receiver station operates;
                -to communicate the instruct signal to;
                -a specific processor and;
                -transferring;
                -said;
                -at least one control signal;
                -to the transmitter;
                -said transmitter transmitting the instruct signal;
                -and the:
                -at least one control signal.
Considering claim 114, there is no support for:
               -The method of;
               -claim 113, wherein one of;
                -said instruct signal;
               -and identification data in respect of;
                -said instruct signal is embedded one of;
               -a television signal;
               -and in;
               -a signal containing;
                -a television program.
```

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Considering claim 115, there is no support for:

- -The method of;
- -claim 113, wherein;
- -a switch communicates signals selectively from;
- -a receiver;
- -and one of;
- -a memory and;
- -a recorder to;
- -a transmitter;
- -said method further comprising the step of:
- -detecting;
- -a first signal;
- -which is effective at the transmitter station;
- -to instruct communication.

Considering claim 116, there is no support for:

- -The method of;
- -claim 113, wherein;
- -a controller controls;
- -a switch;
- -to communicate to;
- -said transmitter one of;
- -a selected mass medium program and;
- -a control signal;
- -said method further comprising the step of:
- -detecting;
- -a signal;
- -which is effective at the transmitter station;
- -to instruct transmission;
- -inputting to;
- -said controller;
- -a signal;
- -which is effective;
- -to control;
- -said switch;
- -controlling;
- -said switch;
- -to communicate one;
- -or more instruct signals according to;

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- -a transmission schedule;
- -controlling;
- -said switch;
- -to communicate;
- -a signal from;
- -a specific one of;
- -a plurality of;
- -instruct signal sources and;
- -controlling;
- -said switch:
- -to communicate;
- -an instruct signal to;
- -a selected one of;
- -a plurality of;
- -transmitters.

Considering claim 117, there is no support for:

- -The method of;
- -claim 113, further comprising the step of* transmitting to;
- -a receiver station;
- -at least one datum that one of;
- -(i) designates one of;
- -a time and;
- -a channel or;
- -transmission of;
- -said instruct signal;
- -and (ii) specifies one of;
- -the title of;
- -and subject matter contained in;
- -a mass medium program associated with;
- -said instruct signal.

Considering claim 118, there is no support for:

- -The method of;
- -claim 108, wherein;
- -said processor processes;
- -a datum designating one of;
- -a television channel and;
- -a television program;

- -said method further comprising the step of;
 - -controlling;
 - -a selective transmission device;
 - -to input to;
 - -a control signal detector at least;
 - -a portion of;
 - -said one of;
 - -a television channel and;
 - -a television program designated by;
 - -said processed datum.

Considering claim 119, there is no support for:

- -The method of;
- -claim 108, wherein;
- -said processor processes;
- -a datum designating one of;
- -a television channel and;
- -a television program;
- -said method further comprising the step of;
- -controlling:
- -a control signal detector;
- -to search for;
- -at least one control signal in the one of;
- -a television channel and;
- -a television program designated by;
- -said processed datum.

Considering claim 120, there is no support for:

- -The method of;
- -claim 108, wherein;
- -said processor processes;
- -a datum designating one of;
- -a television channel and;
- -a television program;
- -said method further comprising the step of;
- -controlling;
- -a selective transmission device;
- -to input to;
- -a computer control signals detected in the one of;

- -a television channel and;
- -a television program designated by;
- -said processed datum.

Considering claim 121, there is no support for:

- -The method of;
- -claim 108, wherein;
- -said processor processes;
- -a datum designating one of;
- -a television channel and;
- -a television program;
- -said method further comprising the step of;
- -controlling;
- -a computer;
- -to respond;
- -to control signals detected in the one of;
- -a television channel and;
- -a television program designated by;
- -said processed datum.

Considering claim 122, there is no support for:

- -The method of:
- -claim 108, wherein;
- -said processor processes;
- -a datum designating one of;
- -a television channel and;
- -a television program;
- -said method further comprising the step of;
- -controlling;
- -a television monitor;
- -to display one of;
- -video;
- -and audio contained in the television channel;
- -or television program designated by;
- -said processed datum.

Considering claim 123, there is no support for:

- -The method of:
- -claim 108, wherein;

```
-said processor processes;
               -a datum designating one of;
               -a television channel and;
               -a television program;
               -said method further comprising the step of;
               -controlling;
               -a video recorder;
               -to one of;
               -record;
               -and play one of;
               -video;
               -and audio contained in the one of;
               -a television channel d television program designated by;
               -said processed datum.
Considering claim 124, there is no support for:
              -The method of;
               -claim 108, wherein;
               -said processor processes;
               -a datum designating one of;
               -a television channel and;
               -a television program;
               -said method further comprising the step of;
               -controlling;
               -a selective transmission device;
               -to communicate;
              -to one of;
               -a video recorder and;
```

Considering claim 125, there is no support for:

- -The method of;
- -claim 108, wherein;

-said processed datum.

-said processor processes;

-a television monitor one of;-the television channel;

-and the television program designated by;

- -a datum designating;
- -at least one specific channel or;

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- -one of;
- -a multichannel cable signal and;
- -a multichannel broadcast signal;
- -said method further comprising the step of;
- -controlling;
- -a selective transmission device;
- -to input to;
- -a control signal detector at least some portion of;
- -the one;
- -or more specific channels designated by;
- -said processed datum.

Considering claim 126, there is no support for:

- -The method of;
- -claim 108, wherein;
- -said processor processes;
- -a datum designating;
- -at least one specific channel or;
- -one of;
- -a multichannel cable signal and;
- -a multichannel broadcast signal;
- -said method further comprising the step of;
- -controlling;
- -a control signal detector;
- -to search for one;
- -or more control signals in the one;
- -or more specific channels designated by;
- -said processed datum.

Considering claim 127, there is no support for:

- -The method of;
- -claim 108, wherein;
- -said processor processes;
- -a datum designating;
- -at least one specific channel or;
- -one of;
- -a multichannel cable signal and;
- -a multichannel broadcast signal;
- -said method further comprising the step of;

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```
-controlling;
```

- -a selective transmission;
- -to input to;
- -a computer control signals detected in the one;
- -or more specific channels designated by;
- -said processed datum.

Considering claim 128, there is no support for:

- -The method of:
- -claim 108, wherein;
- -said processor processes;
- -a datum designating;
- -at least one specific channel or;
- -one of;
- -a multichannel cable signal and;
- -a multichannel broadcast signal;
- -said method further comprising the step of;
- -controlling;
- -a computer;
- -to respond;
- -to control signals detected in the one;
- -or more specific channels designated by;
- -said processed datum.

Considering claim 129, there is no support for:

- -The method of;
- -claim 108, wherein;
- -said processor processes;
- -a datum designating;
- -at least one specific channel or;
- -one of:
- -a multichannel cable signal and;
- -a multichannel broadcast signal;
- -said method further comprising the step of;
- -controlling;
- -a television monitor;
- -to display video;
- -or audio contained in the one;
- -or more specific channels designated by;

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-said processed datum.

Considering claim 130, there is no support for:

- -The method of;
- -claim 108, wherein;
- -said processor processes;
- -a datum designating;
- -at least one specific channel or;
- -one of;
- -a multichannel cable signal and;
- -a multichannel broadcast signal;
- -said method further comprising the step of;
- -controlling;
- -a video recorder;
- -to record;
- -or play video;
- -or audio contained in the one;
- -or more specific channels designated by;
- -said processed datum.

Considering claim 131, there is no support for:

- -The method of;
- -claim 108, wherein;
- -said processor processes;
- -a datum designating;
- -at least one specific channel or;
- -one of:
- -a multichannel cable signal and;
- -a multichannel broadcast signal;
- -said method further comprising the step of;
- -controlling;
- -a selective transmission device;
- -to communicate to:
- -a storage device or;
- -an output device the one;
- -or more specific channels designated by;
- -said processed datum.

Considering claim 132, there is no support for:

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```
-The method of;
-claim 113, wherein;
-a switch communicates signals selectively from;
-a receiver;
-and one of;
-a memory and;
-a recorder to:
-a transmitter;
-said method further comprising the step of;
-determining;
-a specific signal source from which;
-to communicate;
-a second signal to;
-said transmitter.
```

Considering claim 133, there is no support for:

- -The method of;
- -claim 113, wherein;
- -a switch communicates signals selectively from;
- -a receiver;
- -and one of;
- -a memory and;
- -a recorder to;
- -a transmitter;
- -said method further comprising the step of;
- -controlling;
- -said switch;
- -to communicate;
- -a second signal to;
- -said transmitter in response to;
- -a first signal;
- -which is effective at the transmitter station;
- -to instruct communication.

Considering claim 134, there is no support for:

- -The method of;
- -claim 113, wherein;
- -a switch communicates signals selectively from;
- -a receiver;

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```
-and one of;
              -a memory and;
              -a recorder to;
              -a transmitter:
              -said method further comprising the step of;
              -controlling;
              -said switch;
              -to communicate;
              -a second signal from;
              -said selected signal source.
Considering claim 135, there is no support for:
              -The method of;
              -claim 113, wherein;
              -a switch communicates signals selectively from;
              -a receiver;
              -and one of;
              -a memory and;
              -a recorder to:
              -a transmitter:
              -said method further comprising the step of;
              -controlling;
              -said switch;
              -to communicate to;
              -said one of;
              -a memory and;
              -a recorder;
              -a first signal;
              -which is effective at the receiver station;
              -to instruct.
Considering claim 136, there is no support for:
              -The method of;
              -claim 113, wherein;
              -a controller controls;
              -a switch:
              -to communicate to;
```

-said transmitter one of;

-a selected mass medium program and;

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```
-a control signal;
-said method further comprising the step of;
-inputting to;
-said controller;
-a signal;
-which is effective;
-to control;
-said switch.
```

Considering claim 137, there is no support for:

- -The method of;
- -claim 113, wherein;
- -a controller controls;
- -a switch;
- -to communicate to;
- -said transmitter one of;
- -a selected mass medium program and;
- -a control signal;
- -said method further comprising the step of;
- -controlling;
- -said switch;
- -to communicate;
- -at least one instruct signal according to;
- -a transmission schedule.

Considering claim 138, there is no support for:

- -The method of;
- -claim 113, wherein;
- -a controller controls;
- -a switch;
- -to communicate to;
- -said transmitter one of;
- -a selected mass medium program and;
- -a control signal;
- -said method further comprising the step of;
- -controlling;
- -said switch;
- -to communicate;
- -a signal from;

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- -a specific one of;
- -a plurality of;
- -instruct signal sources.

Considering claim 139, there is no support for:

- -The method of;
- -claim 113, wherein;
- -a controller controls;
- -a switch;
- -to communicate to;
- -said transmitter one of;
- -a selected mass medium program and;
- -a control signal;
- -said method further comprising the step of;
- -controlling;
- -said switch;
- -to communicate;
- -said instruct signal to;
- -a selected one of;
- -a plurality of;
- -transmitters.

Considering claim 140, there is no support for:

- -The method of;
- -claim 113, further comprising the step of;
- -transmitting to;
- -said one of;
- -a plurality of;
- -receiver stations;
- -a control signal;
- -to cause;
- -said one of;
- -a plurality of;
- -receiver stations;
- -to tune;
- -to one of;
- -a broadcast and;
- -a cablecast transmission containing;
- -a specific instruct signal.

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Considering claim 141, there is no support for:

- -The method of:
- -claim 89, wherein at least;
- -a multiplicity of;
- -said received plurality of;
- -control signals is inputted locally.

Considering claim 142, there is no support for:

- -The method of;
- -claim 141, wherein;
- -said;
- -at least one of;
- -said plurality of;
- -control signals is inputted locally.

Considering claim 143, there is no support for:

- -The method of:
- -claim 104, wherein;
- -said;
- -at least one control signal includes;
- -a schedule.

Considering claim 144, there is no support for:

- -A method of;
- -coordinating;
- -a presentation at;
- -a plurality of;
- -output devices at;
- -a receiver station;
- -said method comprising the steps of: tuning;
- -a first receiver to;
- -a first one of;
- -a broadcast transmission and;
- -a cablecast transmission;
- -receiving;
- -said first tuned one of;
- -said broadcast transmission and;
- -said cablecast transmission, wherein;
- -said transmission includes programming and;

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- -a first control signal;
- -outputting the received programming on;
- -a first output device;
- -detecting the received first control signal;
- -tuning;
- -a second receiver;
- -to one of;
- -a channel and;
- -a frequency based on;
- -said detected first control signal;
- -to receive;
- -a second one of;
- -a broadcast transmission and;
- -a cablecast transmission;
- -wherein at least;
- -a portion of;
- -said second one of;
- -said broadcast transmission and;
- -said cablecast transmission is related;
- -to the received programming;
- -outputting the related at least;
- -a portion of;
- -said second one of;
- -said broadcast transmission and;
- -said cablecast transmission to:
- -a second output device.

Considering claim 145, there is no support for:

- -A method of;
- -coordinating;
- -a presentation at;
- -a plurality of;
 - -output devices at;
 - -a receiver station;
 - -said method comprising the steps of;
 - -tuning;
 - -a television receiver to;
 - -a first one of;
 - -a broadcast transmission and;

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```
-a cablecast transmission;
-receiving;
-said first tuned one of;
-said broadcast transmission and;
-said cablecast transmission, wherein;
-said transmission includes television programming and;
-a first control signal;
-outputting the received television programming on;
-a first output device;
-detecting the received first control signal;
-tuning;
-an information receiver;
-to:
-at least one of;
-a channel and:
-a frequency based on;
-said detected first control signal;
-to receive;
-a second one of;
-a broadcast transmission and;
-a cablecast transmission;
-wherein at least;
-a portion of;
-said second one of;
-said broadcast transmission and:
-said cablecast transmission is related;
-to the received television programming;
-outputting the related at least;
-a portion of;
-said second one of;
-said broadcast transmission and;
-said cablecast transmission to;
-a second output device.
```

Considering claim 146, there is no support for:

- -A method of;
- -coordinating;
- -a presentation at;
- -a plurality of;

```
-output devices at;
-a receiver station;
-said method comprising the steps of: tuning;
-a television receiver to;
-a first one of;
-a broadcast transmission and;
-a cablecast transmissions;
-receiving;
-said first tuned one of;
-said broadcast transmission and;
-said cablecast transmission, wherein;
-said transmission includes television programming and;
-a first control signal;
-outputting the received television programming on;
-a first output device detecting the received first control signal;
-tuning;
-a radio receiver;
-to;
-at least one of;
-a channel and:
-a frequency based on;
-said detected first control signal;
-to receive;
-a second one of;
-a broadcast transmission and:
-a cablecast transmission, wherein;
-said second one of;
-said broadcast transmission and;
-said cablecast transmission includes;
-a radio program;
-said radio program being related to;
-said received television programming;
-outputting the received radio program to;
-an output device.
```

Considering claim 147, there is no support for:

- -A method of;
- -communicating subscriber station information from;
- -a subscriber station;

```
-to;
-at least one remote data collection station;
-said method comprising the steps of:
-(1) inputting;
-a subscriber reaction at the subscriber station;
-(2) receiving at;
-said subscriber station information that designates;
-at least one of:
-at least one instruct signal;
-to process and;
-an output;
-to deliver in consequence of;
-a subscriber input;
-(3) determining the presence of;
-said subscriber input at;
-said subscriber station by processing;
-said subscriber reaction;
-(4) processing;
-at least one instruct signal;
-which is effective;
-to coordinate;
-a media presentation at;
-said subscriber station in consequence of;
-said step of;
-determining and;
-(5) transferring from;
-said subscriber station to;
-said;
-at least one remote data;
-collection station:
-at least one datum confirming delivery of;
-at least one of:
-(a) said at least one instruct signal from;
-said step of;
-processing and;
-(b) said effect from;
-said step of;
-processing.
```

```
Considering claim 148, there is no support for:
               -The method of:
               -claim 147, wherein;
               -said:
               -at least one instruct signal is input by;
               -a subscriber based on viewing;
               -and listening;
               -to present viewable;
               -and audible programming;
               -said method further comprising the steps of:
               -storing;
               -at least one identifier;
               -which identifies by comparison;
               -to receive;
               -at least one of;
               -specific mass medium programming;
               -specific data;
               -specific news items;
               -and specific computer control instructions and;
               -receiving;
               -said;
               -at least one of;
               -said specific mass medium programming;
               -said specific data;
               -said specific news items, and;
               -said specific computer control instructions in accordance with;
               -said:
               -at least one identifier.
Considering claim 149, there is no support for:
               -The method of;
               -claim 147, wherein;
               -said:
               -at least one instruct signal is input by;
               -a subscriber;
               -said method further comprising the steps of:
               -storing;
               -a subscriber instruction;
               -to one of;
```

```
-process;
-and present;
-at least one of;
-mass medium programming;
-data;
-news items;
-and computer control instructions in;
-a specific fashion;
-and:
-at least one of;
-processing;
-and presenting;
-at least one of;
-said specific mass medium programming;
-said specific data;
-said specific news items, and;
-said specific processor control instructions in accordance with;
-said subscriber instruction.
```

Considering claim 150, there is no support for:

```
-The method of;
```

- -claim 147, wherein;
- -said information that designates one of;
- -a specific subscriber input and;
- -said:
- -at least one instruct signal is detected in;
- -an information transmission from one of;
- -a data source and;
- -a programming source;
- -said method further comprising the steps of;
- -programming;
- -a processor;
- -to respond;
- -to information communicated from;
- -said one of:
- -said data source and;
- -said programming source;
- -receiving the information transmission from;
- -said one of;

```
-said data source and;
               -said programming source;
               -inputting at least;
               -a portion of;
               -said information transmission to;
               -a control signal detector;
               -detecting one of;
               -data and;
               -said;
               -at least one instruct signal in;
               -said information transmission;
               -and passing;
               -said detected one of;
               -said data and;
               -said;
               -at least one instruct signal to;
               -said processor.
Considering claim 151, there is no support for:
               -A method of:
               -controlling;
               -a remote television transmitter station;
               -to communicate television programming material;
               -to;
               -at least one receiver station, with;
               -said remote television transmitter station including one of;
               -a broadcast transmitter and:
               -a cablecast transmitter for transmitting television programming;
               -a plurality of;
               -selective transfer devices each operatively connected to;
               -said one of;
               -said broadcast transmitter and;
               -said cablecast transmitter for communicating;
               -said television programming;
               -a television receiver for receiving;
               -said television processor, wherein each of;
               -said:
               -at least one remote television transmitter station is adapted to;
               -detect the presence of;
```

```
-at least one control signal;
-and;
-to deliver at;
-said one of;
-said broadcast transmitter and;
-said cablecast transmitter;
-said television programming;
-said method comprising the steps of:
-(1) receiving;
-said television programming at;
-said;
-at least one origination transmitter station;
-and delivering;
-said television programming;
-at least one origination transmission transmitter;
-said television programming having;
-an instruct signal;
-which is effective at:
-at least one of:
-said remote television transmitter station and;
-said:
-at least one receiver station;
-to coordinate;
-a media presentation;
-(2) receiving;
-said;
-at least one control signal;
-which at the remote television transmitter station operates;
-to control the communication of;
-said television programming and;
-(3) transmitting;
-said;
-at least one control signal from;
-at least one origination transmitter station before;
-a specific time.
```

Considering claim 152, there is no support for:

-said;

```
-The method of;
               -claim 151, wherein aid;
               -at least one control signal includes;
               -at least one of:
               -a code and;
               -a datum;
               -which operates at the remote television transmitter station;
               -to identify;
               -said television programming;
               -said method further comprising the step of:
               -transmitting;
               -a schedule;
               -which operates at the remote television transmitter station;
               -to communicate;
               -said television programming to;
               -said:
               -at least one origination transmitter at;
               -said specific time.
Considering claim 153, there is no support for:
               -The method of;
               -claim 151, further comprising the step of:
               -embedding;
               -a specific one of;
               -said:
               -at least one control signal in;
               -said specific television programming before transmitting;
               -said television programming to;
               -said remote television transmitter station.
Considering claim 154, there is no support for:
               -The method of;
               -claim 151, wherein;
               -said specific time is;
               -a scheduled time of;
               -transmitting;
               -said television programming at;
               -said remote television transmitter station and;
```

```
-at least;
               -one control signal;
               -is effective at the remote television transmitter station;
               -to control:
               -at least one of;
               -said plurality of;
               -selective transfer devices at different times.
Considering claim 155, there is no support for:
               -A method controlling;
               -at least one remote transmitter station;
               -to deliver:
               -a receiver specific output at;
               -a receiver station;
               -and controlling;
               -said receiver station;
               -to communicate:
               -at least one receiver specific datum to;
               -a remote data collection station, wherein;
               -said receiver station is remote from;
               -said;
               -at least one remote transmitter station and;
               -said remote data collection station is remote from;
               -said receiver station;
               -said method comprising the steps of;
               -(1) receiving at;
               -said;
               -at least one remote transmitter station;
               -at least one instruct signal;
               -which operates;
               -to coordinate;
               -a media presentation;
               -and operates at;
               -said receiver station;
               -to assemble:
               -and communicate;
               -said;
               -at least one receiver specific datum to;
               -said remote data collection station;
```

```
-(2) receiving;
-a control signal;
-which operates at;
-said:
-at least one remote transmitter station;
-to control the communication of;
-said;
-at least one instruct signal;
-and communicating;
-said control signal to;
-said;
-at least one remote transmitter station;
-(3) receiving;
-at least one of;
-a code and;
-an indication designating;
-said;
-at least one instruct signal;
-to be transmitted by;
-said;
-at least one remote transmitter station, wherein;
-said:
-at least one of;
-said code and;
-said indication;
-to serve at;
-said receiver station as;
-a source from which;
-to select;
-said;
-at least one receiver specific datum and;
-(4) transmitting;
-at least one information transmission including;
-said;
-at least one instruct signal and;
-said;
-at least one of;
-said code and;
-said indicator from;
```

```
-said;
               -at least one remote transmitter station.
Considering claim 156, there is no support for:
               -The method of;
               -claim 155, wherein;
               -said;
               -at least one receiver specific datum evidences;
               -at least one of-;
               -(1) at least one of;
               -the availability;
               -use;
               -and usage of;
               -information and;
               -(2) a receiver specific response to;
               -at least one instruct signal.
Considering claim 157, there is no support for:
               -The method of;
               -claim 155, wherein;
               -said;
               -at least one instruct signal includes;
               -a portion of;
               -downloadable code.
Considering claim 158, there is no support for:
               -A method of;
               -controlling;
               -at least one receiver station each of;
               -said;
               -at least one receiver station including;
               -a mass medium programming receiver;
               -a signal detector;
               -at least one of;
               -at least one computer;
               -and:
```

-at least one processor, wherein each of;

-said;

```
-at least one receiver station is adapted;
-to detect the presence of;
-at least one control signal;
-and;
-to input;
-a subscriber reaction to;
-a specific offer communicated in mass medium programming;
-said method comprising the steps of:
-(1) receiving;
-an instruct signal at;
-a transmitter station;
-and delivering;
-said instruct signal to;
-a transmitter;
-said instruct signal being effective at;
-at least one receiver station;
-to coordinate;
-a media presentation;
-(2) receiving;
-at least one of;
-a code and:
-a datum at;
-said transmitter station, wherein;
-said;
-at least one of;
-said code and;
-said datum designates;
-at least one of;
-said instruct signal and;
-said subscriber reaction;
-(3) receiving;
-at least one control signal at;
-said transmitter station, wherein;
-said:
-at least one control signal at;
-said:
-at least one receiver station operates;
```

```
-at least one of;
               -decrypt;
               -and enable at least;
               -a portion of;
               -said instruct signal;
               -(4) transferring;
               -at least one of;
               -said;
               -at least one of;
               -said code and;
               -said datum and;
               -said;
               -at least one control signal;
               -to the transmitter at;
               -said transmitter station and;
               -(5) transmitting;
               -said instruct signal and;
               -said;
               -at least one of;
               -said;
               -at least one of;
               -said code and:
               -said datum and;
               -said;
               -at least one control signal from;
               -said transmitter station.
Considering claim 159, there is no support for:
               -The method of;
               -claim 158, wherein;
               -at least one of;
               -said;
               -at least one control signal and;
               -said;
               -at least one of;
               -said code and;
               -said datum is embedded in one of;
               -a television signal and;
               -a signal containing the television programming.
```

```
Considering claim 160, there is no support for:
               -The method of:
               -claim 158, wherein;
               -at least one of;
               -said instruct;
               -signals and;
               -said;
               -at least one control signal is effective;
               -to output;
               -a subscriber order for one of;
               -a;
               -product and;
               -a service offered in;
               -said specific offer;
               -said method further comprising the step of:
               -transmitting;
               -a portion of;
               -information;
               -which serves as;
               -a basis at;
               -said at least one;
               -receiver station for one of;
               -selecting;
               -and assembling specific information;
               -to communicate;
               -to a;
               -remote data collection site.
Considering claim 161, there is no support for:
               -The method of;
               -claim 158, wherein;
               -said;
               -at least one control signal incorporates;
               -a portion of;
               -downloadable code.
Considering claim 162, there is no support for:
               -The method of;
               -claim 158, wherein;
```

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```
-said mass medium programming is;
```

-to be printed.

Considering claim 163, there is no support for:

- -A method of;
- -controlling;
- -a receiver station including the steps of;
- -detecting one of;
- -a presence and;
- -an absence of;
- -one of;
- -a broadcast control signal and;
- -a cablecast control signal;
- -inputting;
- -an instruct-to-react signal to;
- -a processor based on;
- -said step of;
- -detecting controlling;
- -said processor;
- -to output specific information in response to;
- -said instruct-to-react signal;
- -and coordinating;
- -a media presentation on the basis of;
- -said specific information received from;
- -said processor based on;
- -said step of;
- -controlling;
- -said processor.

Considering claim 164, there is no support for:

- -The method of;
- -claim 163, wherein;
- -a buffer is operatively connected to;
- -said processor for buffering input;
- -said method further comprising the step of: bypassing;
- -said buffer:
- -and inputting;
- -said instruct-to-react signal directly to;
- -said processor.

```
Considering claim 165, there is no support for:
               -The method of;
               -claim 163, wherein;
               -said processor processes;
               -a datum designating;
               -at least one of;
               -a television channel and;
               -a television program;
               -said method further comprising;
               -at least one of;
               -the steps of: controlling;
               -a tuner;
               -to tune;
               -a receiver;
               -to receive;
               -said;
               -at least one of;
               -said television channel and;
               -said television program designated by;
               -said processed datum;
               -controlling;
               -a selective transfer device;
               -to input to;
              -a control signal detector at least;
               -a portion of;
               -said;
               -at least one of;
               -said television channel and;
               -said television program designated by;
               -said processed datum;
               -controlling;
              -a control signal detector;
               -to search for;
               -at least one control signal in;
               -said;
               -at least one of;
               -said television channel and;
               -said television program designated by;
               -said processed datum;
```

```
-controlling;
-a selective transfer device;
-to input to;
-a computer control signals detected in;
-said;
-at least one of;
-said television channel and;
-said television program designated by;
-said processed datum;
-controlling;
-a computer;
-to respond;
-to control signals detected in;
-said;
-at least one of:
-said television channel and;
-said television program designated by;
-said processed datum;
-controlling;
-a television monitor;
-to display;
-at least one of;
-video;
-and audio contained in;
-said;
-at least one of;
-said television channel and;
-said television program designated by;
-said processed datum;
-controlling;
-a video recorder;
-to one of;
-record;
-and play one of;
-video;
-and audio contained in;
-said;
-at least one of;
-said television channel and;
```

```
-said television program designated by;
               -said processed datum;
               -and controlling;
               -a selective transfer device;
               -to communicate;
               -to;
               -at least one of;
               -a video recorder and;
               -a television monitor;
               -said:
               -at least one of;
               -said television channel and;
               -said television program designated by;
               -said processed datum.
Considering claim 166, there is no support for:
               -The method of;
               -claim 163, wherein;
               -said processor processes;
               -a datum designating;
               -at least one specific channel or;
               -one of;
               -a multichannel cable signal and;
               -a multichannel broadcast signal;
               -said method further comprising;
               -at least one of;
               -the steps of: controlling;
               -a tuner;
               -to tune;
               -a converter;
               -to receive;
               -said;
               -at least one specific channel designated by;
               -said processed datum;
               -controlling;
               -a selective transfer device;
              -to input to;
               -a control signal detector at least;
               -a portion of;
```

```
-said;
-at least one specific channel designated by;
-said processed datum;
-controlling;
-a control signal detector;
-to search for;
-at least one control signal in;
-said;
-at least one specific channel designated by;
-said processed datum;
-controlling;
-a selective transfer device;
-to input to;
-a computer control signals detected in;
-said;
-at least one specific channel designated by;
-said processed datum;
-controlling;
-a computer;
-to respond;
-to control signals detected in;
-at least one specific channel designated by;
-said processed datum;
-controlling;
-a television monitor;
-to display;
-at least one of;
-video;
-and audio contained in;
-at least one specific channel designated by;
-said processed datum;
-controlling;
-a video recorder;
-to one of;
-record;
-and play one of;
-video;
```

```
-and audio contained in;
               -said:
               -at least one specific channel designated by;
               -said processed datum;
               -and controlling;
               -a selective transfer device;
               -to communicate;
               -to;
               -at least one of;
               -a storage device and;
               -an output device;
               -said:
               -at least one specific channel designated by;
               -said processed datum.
Considering claim 167, there is no support for:
              -A method of;
               -controlling;
               -a receiver station, wherein;
               -said receiver station has;
               -a processor for passing;
               -and executing instructions and;
               -a clock operatively connected to;
               -said processor for inputting;
               -a timing signal;
               -said method comprising the steps of: receiving one of;
               -a broadcast transmission and;
               -a cablecast transmission;
               -demodulating;
               -said one of;
               -said broadcast transmission and;
               -said cablecast transmission;
               -to detect;
               -an information transmission thereon;
               -said information transmission including;
               -an instruct signal;
               -which is effective;
               -to coordinate media presentation;
               -detecting;
```

```
-said instruct signal on;
               -said information transmission;
               -and passing;
               -said instruct signal to;
               -said processor;
               -delaying;
               -under processor control;
               -the passing of;
               -said instruct signal to;
               -a controllable apparatus;
               -passing;
               -said instruct signal to;
               -said controllable apparatus on the basis of;
               -the timing signal;
               -and coordinating;
               -said media presentation based on;
               -said instruct signal.
Considering claim 168, there is no support for:
               -A method of;
               -communicating data;
               -and update material;
               -to;
               -at least one mass medium programming receiver station;
               -each of;
               -said;
               -at least one mass medium programming receiver station including;
               -at least one of;
               -a broadcast receiver and;
               -a cablecast receiver;
               -a data storage device;
               -a control signal detector, and;
               -a computer, wherein each of;
               -said:
               -at least one mass medium programming receiver station is adapted;
               -to detect;
               -and respond;
               -to;
               -at least one instruct signal;
```

```
-and:
-to store data for subsequent processing;
-said method comprising the steps of:
-(1) receiving data;
-to be transmitted;
-and delivering the data to;
-a transmitter;
-(2) receiving the;
-at least one instruct signal;
-which at the;
-at least one mass medium programming receiver station is effective;
-to coordinate;
-a media presentation based on the data;
-(3) transferring;
-said;
-at least one instruct signal;
-to the transmitter and;
-(4) transmitting;
-at least one information transmission including;
-said data and;
-said;
-at least one instruct signal.
```

Considering claim 169, there is no support for:

- -The method of;
- -claim 168, wherein;
- -at least one of;
- -identification data and;
- -said;
- -at least one instruct signal is embedded in;
- -a television signal containing;
- -said data.

Considering claim 170, there is no support for:

- -The method of;
- -claim 168, wherein;
- -said step of;
- -transmitting directs one of;
- -a broadcast transmission and;

```
-a cablecast transmission to;
               -a plurality of;
               -said:
               -at least one mass medium programming receiver station at the same time;
               -and each of;
               -said plurality of;
               -said;
               -at least one mass medium programming receiver station;
               -at least one of;
               -receives;
               -and responds to;
               -said:
               -at least one instruct signal concurrently.
Considering claim 171, there is no support for:
               -The method of;
               -claim 168, further comprising the steps of:
               -receiving;
               -said data at:
               -a first receiver in:
               -a transmitter station;
               -communicating;
               -said data from;
               -said first receiver to;
               -a memory location;
               -and storing;
               -said data at:
               -said memory location for;
               -a period of;
               -time prior;
               -to communicating;
               -said data:
               -to the transmitter.
```

Considering claim 172, there is no support for:

- -A method of;
- -delivering user specific programming at;
- -a receiver station;
- -said receiver station including;

```
-a receiver;
-a detector;
-a computer;
-and:
-at least one first output device;
-said method comprising the steps of:
-receiving first data;
-and video programming;
-said video programming being of;
-a duration;
-wherein only;
-a portion of;
-said duration contains at least;
-a first time interval of;
-specific relevance;
-and wherein;
-at least one of;
-said first data and;
-said video programming is received from;
-at least one remote transmitter station;
-selecting;
-and delivering;
-said video programming to;
-said:
-at least one first output device for output to;
-a user;
-detecting;
-said first data before;
-a time period during;
-which user specific information will be processed;
-and delivering;
-said first data to;
-said computer;
-generating second data;
-to serve as;
-a basis for delivering;
-said user specific programming by processing at least;
-a first of;
-said first data in;
```

```
-said time period;
                -communicating;
                -at least one of;
                -(i) at least;
                -a second of;
                -said first data;
                -and (ii) at least;
                -a first of;
                -said second data to;
                -said:
                -at least one first output device in;
                -said at least;
                -said first time interval of;
                -specific relevance based on;
                -said step of;
               -generating;
                -and outputting;
               -said user specific programming;
               -said user specific programming including;
               -said video programming and;
               -said;
               -at least one of;
               -said first data and;
               -said second data.
Considering claim 173, there is no support for:
               -The method of;
               -claim 172, wherein;
               -said step of;
               -communicating includes selecting;
               -said;
               -at least one of;
               -(i) said at least;
               -said second of;
               -said first data;
               -and (ii) said at least;
               -said first of;
               -said second data based on;
               -said user specific information.
```

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Considering claim 174, there is no support for: -The method of: -claim 173, wherein; -said only; -said portion of; -said duration includes; -a plurality of; -time intervals of; -specific relevance; -said method further; -comprising the step of: -communicating at least; -a second of; -said first data and; -said second data in at least a; -second of; -said plurality of; -time intervals. Considering claim 175, there is no support for: -The method of; -claim 174, wherein; -said only; -said portion of; -said duration contains; -at least one time interval during; -which user specific programming is not; -to be outputted at; -said; -at least one output device; -said method further comprising the step of; -ceasing; -to output; -said; -at least one of; -(i) said at least; -said second of; -said first data;

-and (ii) said at least;

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```
-said first of;
```

-said second data before;

-said:

-at least one time interval.

Considering claim 176, there is no support for:

-The method of;

-claim 175, wherein;

-a plurality of;

-said second data are outputted at;

-said;

-at least one output device before;

-said;

-at least one time interval.

Considering claim 177, there is no support for:

-The method of;

-claim 176, wherein;

-at least one of;

-second data is outputted at;

-said;

-at least one output device after;

-said;

-at least one time interval.

Considering claim 178, there is no support for:

-The method of;

-claim 172, wherein;

-said;

-at least one first output device includes;

-a second output device;

-said method further comprising the step of:

-outputting at;

-said second output device;

-at least one of;

-(i) a portion of;

-said user;

-specific programming;

-and (ii) information;

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- -which explains;
- -a significance of;
- -said user specific;
- -programming.

Considering claim 179, there is no support for:

- -The method of;
- -claim 178, wherein;
- -said second output device outputs information;
- -which explains;
- -said significance of;
- -at least;
- -said portion of;
- -said user specific programming.

Considering claim 180, there is no support for:

- -The method of;
- -claim 179;
- -wherein supplemental information;
- -is outputted that;
- -identifies;
- -information contained in;
- -said user specific programming by;
- -at least one of;
- -title;
- -and subject matter.

Considering claim 181, there is no support for:

- -The method of;
- -claim 180, wherein;
- -said user specific programming includes;
- -at least one graphic image;
- -and audio describes subject matter contained in;
- -said;
- -at least one graphic image.

Considering claim 182, there is no support for:

- -The method of;
- -claim 181, wherein;

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```
-said;
-at least one graphic image is outputted;
-at least one of;
-said printer and;
-a video monitor.
```

Considering claim 183, there is no support for:

- -The method of;
- -claim 180;
- -wherein at least;
- -a portion of;
- -said supplemental information is outputted at;
- -a speaker.

Considering claim 184, there is no support for:

- -The method of;
- -claim 183, further comprising the step of: one of;
- -processing;
- -and outputting;
- -a digital television signal.

Considering claim 185, there is no support for:

- -The method of;
- -claim 172;
- -said method further comprising the steps of:
- -detecting at least;
- -a first control signal pertaining to;
- -said user specific programming before;
- -said at least;
- -a part of;
- -said video programming containing;
- -said only;
- -said portion of;
- -said duration is displayed at;
- -said;
- -at least one output device;
- -and;
- -outputting at least;
- -a portion of;

```
-said user specific programming based on;
               -said at least;
               -said first control signal.
Considering claim 186, there is no support for:
               -The method of;
               -claim 185, wherein;
               -said first control signal is;
               -received from;
               -said;
               -at least one remote transmitter station;
               -said method further comprising the;
               -step of:
               -selecting at least;
               -a portion of;
               -said;
               -at least one of;
               -said first data and;
               -said video;
               -programming based on;
               -said at least;
               -said first control signal.
Considering claim 187, there is no support for:
               -The method of;
               -claim 185, wherein at least;
               -a second control signal pertaining to;
               -said user specific programming is detected before at least part of;
               -the video;
               -programming contained in;
               -said at least;
               -said first time interval is displayed at;
               -said at least one;
               -output device;
               -said method further comprising the step of:
               -passing;
               -said at least;
               -said second control signal to;
               -said computer.
```

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```
Considering claim 188, there is no support for:
               -The method of;
               -claim 187, wherein;
               -said;
               -at least one of;
               -(i)said at least;
               -said second of;
               -said first data;
               -and (ii) said at least;
               -said first of;
               -said second data is communicated to;
               -said:
               -at least one output device based on;
               -said at least;
               -said second control signal.
Considering claim 189, there is no support for:
               -The method of;
               -claim 188, wherein;
               -at least one of;
               -said second data is generated in response to;
               -said at least;
               -said second control signal;
               -said method further comprising the step of: detecting;
               -said at least:
               -said second control signal before the end of;
               -said time period.
Considering claim 190, there is no support for:
               -The method of:
               -claim 172, wherein;
               -said video programming is;
               -received from:
               -said;
               -at least one remote transmitter station;
               -said method further comprising the;
               -step of:
```

-programming;

-said receiver station;

```
-to process digital data embedded in;
               -a signal;
               -containing;
               -said video programming.
Considering claim 191, there is no support for:
               -The method of;
               -claim 190, wherein;
               -said receiver station performs;
               -at least one of;
               -said steps of;
               -generating;
               -and communicating based on;
               -said step of;
               -programming.
Considering claim 192, there is no support for:
               -The method of;
               -claim 172, wherein;
               -said first data are received from;
               -said;
               -at least one remote transmitter station;
               -said method further comprising the step of:
               -programming;
               -said receiver station;
               -to process digital data embedded in;
               -a signal containing;
               -said first data.
Considering claim 193, there is no support for:
              -The method of;
               -claim 192, wherein;
               -said receiver station performs;
               -at least one of;
               -said steps of;
               -generating;
              -and communicating based on;
               -said step of;
               -programming.
```

Considering claim 194, there is no support for:

- -The method of;
- -claim 172;
- -said method further comprising the steps of:
- -detecting at least;
- -a first discrete signal in;
- -a signal transmitted from;
- -said at least;
- -one remote transmitter station and;
- -organizing information contained in;
- -said at least;
- -a first discrete signal with;
- -information contained in;
- -a second discrete signal in order;
- -to transfer;
- -at least one microprocessor;
- -instruction.

Considering claim 195, there is no support for:

- -The method of;
- -claim 194, wherein;
- -said:
- -at least one microprocessor instruction contains;
- -said information contained in;
- -said at least;
- -said first discrete signal and;
- -said information contained in;
- -a second discrete signal and;
- -said step of;
- -organizing comprises assembling.

Considering claim 196, there is no support for:

- -The method of;
- -claim 172, wherein;
- -said first data and;
- -said video programming are both received from;
- -said;
- -at least one remote transmitter station.

```
Considering claim 197, there is no support for:
               -The method of:
               -claim 196, wherein;
               -said;
               -at least one remote transmitter station includes;
               -at least one intermediate transmitter station;
               -said method further comprising the step of:
               -tuning;
               -at least one receiver;
               -to receive:
               -said;
               -at least one of;
               -said first data and;
               -said video programming.
Considering claim 198, there is no support for:
               -The method of:
               -claim 196, wherein;
               -said receiver station is enabled;
               -to output:
               -said user specific programming based on;
               -a signal transmitted from;
               -said receiver station to;
               -said;
               -at least one remote transmitter station.
Considering claim 199, there is no support for:
               -A method of;
               -delivering user specific programming;
               -at least one receiver station;
               -each of;
               -said;
               -at least one receiver station including;
               -a receiver;
               -at least one output device;
               -a detector;
               -and;
               -at least one processor operatively connected to;
               -said;
```

```
-at least one output device;
-wherein each of;
-said;
-at least one receiver station is adapted;
-to detect first data and;
-generate second data;
-said second data;
-to serve as;
-a basis for communicating user specific;
-information;
-said method comprising the steps of:
-receiving;
-at least one of;
-video programming and;
-said first data at at least;
-a first;
-transmitter station;
-said video programming;
-to be displayed at;
-said:
-at least one output device for;
-at least:
-a duration of;
-time;
-wherein only;
-a portion of;
-said duration of;
-time is;
-to include at least;
-one time interval of;
-specific relevance;
-and wherein;
-said first data are;
-to be processed at;
-said at;
-least one receiver station;
-to generate;
-said second data;
-commencing;
```

```
-to transfer;
               -said;
               -at least one of;
               -said video programming and;
               -said first;
               -data:
               -to at least;
               -a first transmitter at;
               -a first specific time and;
               -transmitting from;
               -said;
               -at least one transmitter station;
               -at least one information;
               -transmission including;
               -said;
               -at least one of;
               -said video programming and;
               -said first data.
Considering claim 200, there is no support for:
               -The method of;
               -claim 199;
               -said method further comprising the step of;
               -storing;
               -said;
               -at least one of;
               -said video programming and;
               -said first data before;
               -said first specific time.
Considering claim 201, there is no support for:
               -The method of;
               -claim 200;
               -said method further comprising the steps of:
               -receiving;
               -said;
               -at least one of;
               -said video programming and;
               -said first data from a;
```

```
-second transmitter station;
               -and controlling;
               -at least one selective transfer device;
               -to communicate;
               -said;
               -at least one of;
               -said video programming and;
               -said first data;
               -to;
               -at least one of:
               -(i) a memory;
               -and (ii) said at least;
               -said first transmitter before;
               -said first specific time.
Considering claim 202, there is no support for:
               -The method of;
               -claim 201, wherein;
               -said;
               -at least one selective transfer device includes;
               -at least one of;
               -a switch and;
               -a processor.
Considering claim 203, there is no support for:
               -The method of;
               -claim 199, wherein;
               -said at least;
               -said first;
               -transmitter station transmits both of;
               -said video programming and;
               -said first data;
               -said method;
               -further comprising the step of:
               -commencing;
               -to transfer the other of;
               -said video programming and;
               -said first data to;
               -said at least;
```

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```
-said first transmitter at;
```

-a second specific time.

Considering claim 204, there is no support for:

- -The method of;
- -claim 203, wherein;
- -said at least;
- -said first transmitter station transmits;
- -at least one of;
- -said first data before transmitting at least;
- -a portion of;
- -said video programming.

Considering claim 205, there is no support for:

- -The method of;
- -claim 204, wherein;
- -said second data are generated at;
- -said;
- -at least one receiver station before;
- -said at least:
- -said portion of;
- -said video programming is outputted at;
- -said;
- -at least one output device;
- -said method further comprising the step of;
- -transmitting;
- -at least one control signal;
- -which serves as:
- -a basis, at;
- -said at least one;
- -receiver station, for outputting at least;
- -a portion of;
- -said user specific programming.

Considering claim 206, there is no support for:

- -The method of;
- -claim 199, wherein;
- -said;
- -at least one receiver station outputs audio while outputting;

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```
-said video programming;
```

- -said method further comprising the step of;
- -transmitting;
- -said audio.

Considering claim 207, there is no support for:

- -The method of;
- -claim 206, wherein;
- -said audio explains a;
- -significance of;
- -at least;
- -a portion of;
- -said user specific programming;
- -said method further;
- -comprising the step of:
- -commencing;
- -to transfer;
- -said audio to;
- -said at least;
- -said first transmitter before;
- -transferring at least;
- -a portion of;
- -said video programming to;
- -said at least:
- -said first transmitter.

Considering claim 208, there is no support for:

- -The method of;
- -claim 207, wherein;
- -said user specific information is outputted at;
- -said:
- -at least one output device while;
- -said at least;
- -said portion of;
- -said video programming is outputted at;
- -said;
- -at least one output device.

Considering claim 209, there is no support for:

```
-The method of;
-claim 208, wherein;
-said audio explains;
-a meaning of;
-said user specific information.
```

Considering claim 210, there is no support for:

- -The method of;
- -claim 209, wherein;
- -said video programming and;
- -said audio are included in television programming;
- -said method further comprising the step of;
- -transmitting;
- -a television signal.

Considering claim 211, there is no support for:

- -The method of;
- -claim 210, wherein;
- -at least one control signal enables;
- -said:
- -at least one receiver station;
- -to deliver:
- -said user specific programming at;
- -said;
- -at least one output device;
- -said method further comprising the step of:
- -embedding;
- -said;
- -at least one control signal in;
- -at least one of;
- -said television signal and;
- -a multichannel signal containing;
- -said television signal.

Considering claim 212, there is no support for:

- -The method of;
- -claim 211, wherein;
- -said;
- -at least one control signal causes;

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-said;
-at least one receiver station;
-to;
-at least one of;
-generate;
-said second data;
-and communicate;
-said user specific information to;
-said;
-at least one output device.
```

Considering claim 213, there is no support for:

- -The method of;
- -claim 212, wherein;
- -said at least:
- -said first transmitter station includes;
- -a second transmitter station and;
- -said;
- -at least one control signal causes;
- -said second transmitter station;
- -to transfer;
- -said:
- -at least one of;
- -said television programming to;
- -a second transmitter.

Considering claim 214, there is no support for:

- -The method of;
- -claim 213, wherein;
- -said second transmitter station is;
- -an intermediate transmitter station.

Considering claim 215, there is no support for:

- -A method of;
- -delivering user specific programming;
- -at least one receiver station, each of;
- -said;
- -at least one receiver station including;
- -a receiver;

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-at least one output device;
-a detector;
-and;
-at least one processor operatively connected to;
-said;
-at least one output device;
-wherein each of;
-said;
-at least one receiver station is adapted;
-to detect first data;
-and generate second data;
-said second data;
-to serve as;
-a basis for communicating user specific information;
-said method comprising the steps of:
-(1) receiving;
-at least one of;
-video programming and;
-said first data at at least;
-a first transmitter station;
-said video programming;
-to be outputted at;
-said;
-at least one output device;
-for at least;
-a duration of;
-time;
-wherein only;
-a portion of;
-said duration of;
-time;
-to include;
-at least one time interval of;
-specific relevance;
-and wherein;
-said first data are:
-to be processed at;
-said;
-at least one receiver station;
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-to generate;
               -said second data;
               -(2) receiving at least;
               -a first control signal;
               -which operates at;
               -said at least;
               -said first transmitter station;
               -to communicate;
               -said:
               -at least one of;
               -said video programming and;
               -said first data;
               -to at least;
               -a first transmitter and;
               -(3) transmitting from;
               -at least one transmitter station;
               -at least one information transmission including;
               -said;
               -at least one of:
               -said video programming and;
               -said first data.
Considering claim 216, there is no support for:
               -The method of:
               -claim 215;
               -said method further comprising the step of:
               -storing;
               -said;
               -at least one of;
               -said video programming and;
               -said first data in accordance with;
               -said at least;
               -said first control signal.
Considering claim 217, there is no support for:
               -The method of;
               -claim 216;
               -said method further comprising the step of:
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-identifying;
               -said;
               -at least one of;
               -said video programming and;
               -said first data in accordance with;
               -said;
               -at least one control signal.
Considering claim 218, there is no support for:
               -The method of;
               -claim 216;
               -said method further comprising the step of:
               -controlling;
               -at least one selective transfer device;
               -to communicate;
               -said;
               -at least one of:
               -said video programming and;
               -said first data;
               -to:
               -at least one of;
               -(i) a memory;
               -and (ii) said at least;
               -said first transmitter in accordance with;
               -said:
               -at least one control signal.
Considering claim 219, there is no support for:
               -The method of;
               -claim 218, wherein;
               -at least one selective transfer device includes;
               -at least one of:
               -a switch and;
               -a processor.
Considering claim 220, there is no support for:
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-The method of; -claim 218, wherein;

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-said;
               -at least one control signal includes;
               -a schedule.
Considering claim 221, there is no support for:
               -The method of;
               -claim 220, wherein;
               -said at least;
               -said first;
               -transmitter station transmits both of;
               -said video programming and;
               -said first data;
               -said method;
               -further comprising the step of:
               -transmitting;
               -at least one of;
               -said first data before transmitting at least;
               -a portion of;
               -said video programming.
Considering claim 222, there is no support for:
               -The method of;
               -claim 220;
               -said method further comprising the step;
               -of:
               -transmitting;
               -at least one instruction;
               -which serves as;
               -a basis at;
               -said;
               -at least one receiver station for outputting at least;
               -a portion of;
               -said user specific programming.
Considering claim 223, there is no support for:
               -The method of;
               -claim 215;
               -said method further comprising the stop;
               -of:
```

- -transmitting audio in accordance with;
- -said at least;
- -said first control signal.

Considering claim 224, there is no support for:

- -The method of;
- -claim 223, wherein;
- -said audio explains;
- -a significance of;
- -at least;
- -a portion of;
- -said user specific programming.

Considering claim 225, there is no support for:

- -The method of;
- -claim 224, wherein;
- -said at least;
- -said first control signal causes;
- -said at least;
- -said first transmitter station;
- -to transfer;
- -said audio from;
- -at least one of;
- -a switch and;
- -a memory to;
- -said at least;
- -said first transmitter.

Considering claim 226, there is no support for:

- -The method of;
- -claim 215, wherein;
- -said video programming;
- -is included in:
- -television programming;
- -said method further comprising the step of;
- -transmitting;
- -a television signal in accordance with;
- -said at least;
- -said first control signal.

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Considering claim 227, there is no support for:

- -The method of;
- -claim 226, wherein;
- -at least one instruction enables;
- -said;
- -at least one receiver station;
- -to deliver;
- -said user specific programming at;
- -said at least one;
- -output device;
- -said method further comprising the step of;
- -embedding;
- -said;
- -at least one instruction in;
- -at least one of;
- -said television signal and;
- -a multichannel signal containing;
- -said television signal.

Considering claim 228, there is no support for:

- -The method of;
- -claim 227, wherein;
- -said;
- -at least one instruction enables;
- -said:
- -at least one receiver station;
- -to identify at least;
- -said television programming.

Considering claim 229, there is no support for:

- -The method of;
- -claim 228, wherein;
- -said at least;
- -said first control signal includes;
- -said;
- -at least one instruction.

Considering claim 230, there is no support for:

-The method of;

- -claim 215, wherein;
- -said at least;
- -said first transmitter is located at;
- -a second transmitter station;
- -said method further comprising the steps of;
- -communicating;
- -said at least;
- -said first control signal to;
- -a second transmitter;
- -and transmitting;
- -said at least;
- -said first control signal.

Considering claim 231, there is no support for:

- -The method of;
- -claim 230, wherein;
- -said at least:
- -said first control;
- -signal enables;
- -said second transmitter station;
- -to identify;
- -a programming signal;
- -said method;
- -further comprising the step of:
- -including at least;
- -a first identifier in;
- -said at least;
- -said first control signal.

Considering claim 232, there is no support for:

- -The method of;
- -claim 231, wherein;
- -said at least;
- -said second;
- -transmitter station identifies;
- -said programming signal based on;
- -a comparison;
- -said method;
- -further comprising the steps of:

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- -including;
- -a second identifier in;
- -at least one second control signal and;
- -transmitting;
- -said at least;
- -said second control signal.

Considering claim 233, there is no support for:

- -The method of:
- -claim 232, wherein;
- -said programming signal contains;
- -at least one of;
- -said video programming and;
- -said first data.

Considering claim 234, there is no support for:

- -The method of;
- -claim 233, wherein;
- -said second control signal;
- -enables;
- -said second transmitter station;
- -to transmit;
- -said programming signal at;
- -a scheduled time;
- -said method further comprising the step of;
- -including;
- -at least one datum of;
- -said scheduled time in;
- -at least one of;
- -said at least;
- -said first control signal and;
- -said second control signal.

Considering claim 235, there is no support for:

- -A method of;
- -delivering user specific programming at;
- -a receiver;
- -station;
- -said receiver station including;

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-a receiver;
-a detector;
-a computer;
-and;
-at least one output;
-device;
-said method comprising the steps of:
-receiving first data;
-and video programming;
-said video programming being of;
-a duration;
-wherein only;
-a portion of;
-said duration contains;
-at least one time interval of;
-specific relevance;
-and:
-at least one of;
-said first data and;
-said video programming is received from;
-at least one remote transmitter station;
-selecting;
-and delivering;
-said video programming to;
-said;
-at least one output device;
-for output to;
-a user;
-storing;
-said first data before;
-a time period during;
-which user specific information will be processed;
-generating second data;
-to serve as;
-a basis for delivering;
-said user specific programming by processing;
-at least one of;
-said first data in;
-said time period;
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-communicating;
-said second data to;
-said;
-at least one output device in;
-said;
-at least one time interval of;
-specific relevance based on;
-said step of;
-generating second data;
-and outputting;
-said user specific programming;
-said user specific programming including;
-said video programming and;
-said second data.
```

4. Pending claims of the group, 6-235, that are directed to *digital* related processes and apparatus, they are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Considering pending claims of the group 6-235, that are directed to *digital* related processes and apparatus, the group of pending claims is not found to be enabled in view of the discussion given below as to the level of skill of the ordinary artisan at the time the '87 C.I.P. disclosure was made. (As per an earlier agreement, copies of the "prior art" cited in this paragraph have not been provided with this Office action since such copies were previously provided in co-pending application S.N. 08/499,097).

I. Applicants have now presented claims which are directed to the distribution of, inter alia,

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of digital television signals, digital signals, and anything directed to derivatives of the term 'digital', as was allegedly described by applicants '87 C.I.P. disclosure. However, the following is noted:

As originally disclosed in the '87 C.I.P., it is apparent that applicants used the terminology, *inter alia*, "digital television signals" and "digital" to refer to television signals which represented conventional television programming and which comprised digitized audio and video signal components (see "Example #7" which begins of page 288 of instant disclosure). However, in the '87 C.I.P. disclosure as originally filed, applicants clearly lacked any specific description as to how:

- a) the "digital television signals" of applicants' alleged invention(s) were to have been formatted for transmission over a television distribution system using the method(s) that are now recited in the pending claims; and
 - **b)** as to how the transmission circuitry of applicants' alleged invention(s) was modified and/or configured for the purpose of handling, *inter alia*, "digital television signals" in the matter that is now recited in the pending claims.

Apparent justification for the lack of such descriptions seems to be based on:

1) the allegation made by applicants' original '87 C.I.P. disclosure that "digital television signals" and like terms of the type described therein, were well known in the art at the time of applicants' alleged invention (note lines 30-33 on page 288 of applicants' disclosure), and;

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2) on the apparent assumption that the "digital television signals" of applicants' disclosure could be handled/transmitted in a manner that was interchangeable with the handling and transmission, *inter alia*, of conventional analog television signals.⁴ Hence and on the basis of these substantiated facts, Examiner legally concludes that such allegations and assumptions, made at the time of applicants' alleged invention, are respectively false and erroneous.

The examiner emphasizes that he does not dispute the fact that broadcasting digitally formatted television signals was in fact well known to those skilled in the art at the time of applicants' alleged invention. Specifically, the examiner acknowledges that the transmission of digital television signals was known in the art when, under "rare" circumstances, a transmission channel of sufficient bandwidth was available. However, it is noted that the transmission of these conventional digital television signals was *not* interchangeable with the transmission of analog television signal as assumed by applicants' original '87 C.I.P. disclosure because of the extremely large bandwidth that was required to transmit conventional digital television signals; i.e. this was true even

⁴For example, the original '87 C.I.P. disclosure described portions of applicants' alleged invention(s) as having operated to transmit digital television signals over a TV channel during a *first period of time* and as having transmitted analog television signals over said same channel during a *subsequent period of time* (see lines 1-5 on page 302 of applicants' instant disclosure). However, no discussion as to any difference in the handling of the two different television signals by the alleged invention(s) was ever provided, suggested, or recognized by applicants' original '87 C.I.P. disclosure).

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when the digital television signals had been *compressed* using state of the art bandwidth compression techniques [1] [2] [3].

Given the above, the examiner maintains that the description found in applicants' original '87 C.I.P. disclosure pertaining to the transmission of "digital television signals" using applicants' alleged invention(s) was insufficient to have enabled the pending claims using the terminology. Specifically and based on these substantiated facts, it is legally concluded that applicants' original '87 C.I.P. disclosure at least failed to disclose and describe the manner in which the recited "digital television signals" had to have been formatted and processed so as to have enabled them to have been handled in the manner that was originally described in the '87 C.I.P.; e.g. the manner that now seems to be claimed.

In view of the above, applicants are hereby requested to submit evidence (e.g. a US Patent or a printed publication) which support the allegations and assumptions on which applicants' original '87 C.I.P. disclosure was clearly based; i.e. references which show the means needed to format and transmit "digital television signals" in a manner required by applicants' disclosed/claimed invention(s) were in fact well known to those skilled in the art at the time of applicants' alleged invention.

II. The examiner notes that even those sections of applicants' original '87 C.I.P. disclosure which were directed to the transmission of, *inter alia*, "digital television signals", e.g. "Example #7" which begins on page 288 therein, provide few clues as to how the recited "digital television

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signals" and like terms were formatted, handled, and transmitted by applicants' alleged invention(s) in order to have enable them to have been processed in the manner that is now set forth in the pending claims. For example, the description of applicants' alleged invention(s) failed to explain:

1) how the "digital television signals", *inter alia*, of applicants' alleged invention(s) were formatted and/or compressed so as to have enabled them to have been handled,

transmitted, and/or processed in the manner that is now recited in the pending claims;

- 2) how the "digital television signals", *inter alia*, of applicants' alleged invention(s) were formatted and/or compressed so that they could be transmitted over the same TV channel
- that was used to carry conventional analog TV broadcasts as originally disclosed (see
- lines 1-5 on page 302 of applicants' disclosure);
- 3) how the subscriber stations of applicants' alleged invention were modified in order to have handled/processed "digital television signals", *inter alia*, in the manner that is now claimed;
- 4) how the "SPAM" messages of subscriber stations were to have been embedded in the "digital television signals", how said "SPAM" messages were to have been carried by said digitally formatted television signals, and how said "SPAM" messages were to have been extracted from digitally formatted televisions signals;
- 5) how the bit-rate of the "SPAM" messages that were carried by said digital

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television signals was related to the bit-rate of the digital television signals into which they were embedded and how this bit rate related to the bit-rate of the "SPAM" signals that were carried in the analog television signals and how the disclosed/claimed system was configured to handle any such differences (e.g. while not addressed by applicants' original disclosure, it appears that the conventional differences between the bandwidth of digital television signals and analog television signals would translated into respective difference in the bit-rate of the "SPAM" messages that were embedded in respective ones of the two types of television signals).

III. On the basis of the substantiated facts set forth in parts "I" and "II" above, the Examiner legally concludes that the pending claims which are directed to the handling/transmission of "digital television signals" would have required *undue* experimentation by applicants' '87 C.I.P. disclosure because the allegations and assumptions, on which the disclosed handling and transmission of such digital television signals was based, were respectively false and erroneous. The examiner legally concludes that these pending claims represent an *invitation to experiment unduly*⁵ when read in the context of the state of the "digital television signal", *inter alia*, transmission art which actually existed at the time of applicants' alleged invention; i.e. the technology required to have handled/transmitted "digital television signals" in the manner that

⁵It is noted that because pending claims are not original, actually, <u>no experimentation is permitted</u> under Section 112's written description requirement.

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was disclosed, and thus in the manner that is apparently claimed, does not appear to have existed at the time of applicants' alleged invention.

[1] The publication "Digital Television Transmission With 34 Mbit/s" by <u>Burkhardt et al</u>. evidences a conventional transmission system in which a Television signal was broadcast in a digital format (see Figure 2). Even though the bandwidth of the digital television signal was compressed prior to transmission, said digital signal still required a 22 MHZ transmission channel (see the second paragraph under the heading "Bit-Rate Reduction" on page 244); i.e. wherein a bandwidth of 22 MHZ is almost 4X that of a standard 6 MHZ TV channel used for analog television signal transmission.

- [2] The US Patent No. 3,755,624 to <u>Sekimoto</u> evidences a conventional system in which a television signal was digitally formatted and bandwidth compressed prior to broadcast. The resulting bit-rate of this compressed digital television signal was 32 Mbit/s which required a bandwidth more than 3X that of said standard 6 MHZ Tv channel.
- [3] The US Patent No. 4,742,543 to <u>Fredericksen</u> illustrates a system in which a television signal was processed on the transmitter side of a broadcast system in a digital data format (see figure 1). However, prior to broadcast, <u>Fredericksen</u> converted the digital television signal back into an analog signal format (@33). Such D/A conversion was described as having been necessary because the standard analog TV channel that was used to transmit the television signal was *not* of sufficient bandwidth to carry the signal in it's digital format (note lines 18-23 of column

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5). This provides further substantiated facts for why the conventional "digital television signals" could not have been handled in the manner described by applicants' as their alleged invention(s) without undue experimentation.

- 5. Pending claims of the group, 6-235, that are directed to *data* (and terms derived from data, i.e. *datum*, *indicia*, etc.) related processes and apparatus, they are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.
- a) As originally described in the '87 C.I.P., applicants' written description described a method for formatting various types of digital control and display data segments called: "SPAM Messages". Once formatted, the "normal locations" of television and/or radio programming were embedded within the SPAM Messages so as to have created a combined signal which was then transmitted through a 'conventional radio channel' or a 'conventional television channel' wherein the "normal location" was described as 'the vertical blanking interval' of a television video signal.
- b) As also originally described in the '87 C.I.P, applicants' disclosure contained broad statements which suggested that said *SPAM messages* could be embedded within the "normal locations" of other types of programming besides radio and television programming.

 Specifically, the '87 C.I.P. also disclosed that the *SPAM messages* could be embedded within the

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"normal locations" of "other media" such as broadcast "data" or print (see the last line on instant page 35; lines 17-20 on instant page 71 and lines 7-9 on instant page 72). However, these statements are found to contradict the alleged invention as described by the later described so

In the alleged "more precise" description, applicants explicitly taught that it was the "other media" which is embedded within the "information portion" of said SPAM messages. Hence the contradiction:

called "more precise" description (see lines 17-20 on instant page 72).

-first applicants teach that said SPAM messages are embedded within the "normal locations" of said "other media"; but later they teach

-it is the other media that is embedded within the information portions of said SPAM messages!

The disclosure, by these substantiated facts, *inter alia*, has caused examiner to legally conclude that the written description related to the term "data" and it's derivatives is so contradictory to the point that it would have required *undue*⁶ experimentation in order for the ordinary artisan to practice the alleged invention.

⁶As explained above, Section 112's written description requirement permits no experimentation even when less than undue when claims are not originally filed, as in the present case.

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The examiner notes that the preceding discussion is supported by the fact that all concrete examples of system(s) and method(s) which were specifically illustrated in applicants' original disclosure were consistent only with said more precise teachings.

c) As is evidenced from parts "a)" and "b)" of this paragraph, applicants' original '87 C.I.P. disclosure did describe system(s) which formatted, transmitted, received, processed, and/or displayed radio and television *program units* under control of, and/or along with, embedded "SPAM messages". However, as evidenced in parts "a)" and "b)" of the above, applicants' disclosure did not describe system(s) and method(s) which formatted, transmitted, received, processed, and/or *displayed "data"* program units under control of, and/or along with, associated SPAM messages because data program units (i.e. as the terminology "data", inter alia, was coined and used within applicants' written description) were actually transmitted with said SPAM messages. Specifically, the examiner maintains that said "more precise" teachings of applicants' own disclosure evidenced that the handling of the radio and television programming program units by the disclosed system(s)/method(s) was different from, and was non-analogous? with, the disclosed handling of data by the disclosed system(s)/method(s). More

⁷ The examiner notes that if the disclosed SPAM signals were simply embedded within the digital data stream(s) of *other media*, as they were embedded within the television and radio programming, the ability of the disclosed "processors" to detect and synchronize themselves to the *SPAM signals* would be destroyed because the "cadence" used and required by the disclosed processors for synchronization purposes would no longer have existed; e.g. the start of a new *SPAM message* would *not* always have followed an "end-of-field" (EOF) signal as was required by processors in all of the embodiments of applicants' disclosure. However, it is noted that such a synchronization problem was clearly avoided when the other media was carried within the

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Specifically, said *more precise* teachings of applicants' original disclosure evidence the fact that only TV and radio programming was carried in the form of said described *program units*, while said "data" was carried as information packets <u>located within said SPAM messages themselves</u> (see part "b)" of this paragraph).

d) Given the substantiated facts set forth in "a)", "b)", and "c)" above, the examiner legally concludes that the recitations of pending claims using the term and it's derivatives would have required undue experimentation by applicants' '87 C.I.P. Specifically, the examiner finds the facts that applicants' disclosure at least failed to set forth the means and/or steps needed to make and use system(s)/method(s) in which recited "data", inter alia, were formatted, transmitted, received, processed, and/or displayed in the manner which was explicitly disclosed/exemplified for television and radio program units. Specifically, in applicants' written description, the disclosed system(s) and method(s) for formatting, transmitting, received, processing, and/or displaying said television and radio program units were incompatible with system(s) and method(s) which would have been needed to format, transmit, receive, process, and/or display program units comprised of "data". Moreover, it is maintained that "data" (as coined and used within applicants' written description) could not be processed in the same manner that was described for television and radio programming program units as now appears to be claimed in the above enumerated pending claims.

SPAM messages as appears to have actually been taught by the *more precise* teachings of applicants' disclosure (again, see lines 17-20 on page 72).

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6. Claims of the group 6-235, are rejected under 35 U.S.C. 112, first paragraph, because the **best mode** contemplated by the inventor has not been disclosed. Evidence of concealment of the best mode is based upon, *inter alia*: the *nesting* of detectors, signal processors, monitors, decoyptors, decoders, buffers, controllers, computers, micro-computers.

Also for the apparent nesting of 'programming in data', and of 'data in programming', 'data being programming', and 'data not being programming', etc, what is programming, and what is not programming is not understood.

The '87 discloses is mis-leading and confusing. The ordinary artisan would *not* have understood terms, *inter alia*, was applicants best mode in view of the '87 disclosure *alone*, i.e. the instant disclosure. It is concluded that the use of the omitted '81 disclosure to understand the instant disclosure is impermissible and falls subject to the *insidious* possibility circumventing Section 112. The ordinary artisan of '87 would have to understand what was set forth therein without the benefit of another document, i.e. '81. Moreover, the circular description for what is "data", "programming", for what "programming unit", "signal word", "data unit" would also have caused the ordinary artisan so much trouble that the best mode would not have been recognized when considering the '87 disclosure *alone*.

Notwithstanding, the description at pages 14-15 is so confusing as to what shall be the best mode for the pages 14-15 terms including, *inter alia*, **signal** *word*, signal unit (reference discussion under objection to the specification above), *etc*, that the best mode cannot be discerned for which shall be used.

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Likewise, in '81 applicants describe their preferred mode to preclude headers; however, the '87 spec appears to use nothing but *headers* for the SPAM (reference discussion above), even though applicants appear to describe 'not using headers', once again, as their best mode in '87. It appears applicants have concealed the best mode for their data, *inter alia*, because even though they described the preferred mode as 'not using headers', they, in fact, failed to reveal how they actually accomplished, *inter alia*, their preferred mode.

The instant case is like <u>In re Ruschig</u>, 379 F.2d 990, 154 U.S.P.Q. 118 (C.C.P.A. 1967) where the judge's analysis is found to be appropriate to applicants' claims.

It is an old custom in the woods to mark trails by making blaze marks on trees. It is no help in finding a trail or in finding one's way through the woods where the trails have disappeared-or have not yet been made, which is more like the case here-to be confronted simply by a large number of unmarked trees. Appellants are pointing to trees. We are looking for blaze marks which single out particular trees. We see none... Working backward from a knowledge of chlorpropamide, that is by hindsight, it is all very clear what route one would travel through the forest of the specification to arrive at it. But looking at the problem, as we must, from the standpoint of one with no foreknowledge of the specific compound, it is our considered opinion that the board was correct in saying: "Not having been specifically named or mentioned in any manner, one is left to selection from the myriads of possibilities encompassed by the broad disclosure, with no guide indicating or directing that this particular selection should be made rather than any of the many other which could also be made". (emphasis added).

Ruschig, 154 U.S.P.Q. at 122-123.

The '87 disclosure is analogous to the Ruschig woods. The Section 112 responses are pointing to applicants' woods in an analogous way that <u>Ruschig</u> appellants were "pointing to trees". Working backward from a knowledge later provided in Section 112 responses, there are

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some instances where limited support *might* exist. However, looking forward at the problem as the examiner *must* from the standpoint of no "foreknowledge", and hence without the Section 112 responses, the examiner cannot find the processes in the manner as they are now claimed.

Applicants' disclosure addresses a variety of claim limitations with varying degrees of specificity, and apparently describes contradictory processes and describes terms with contradictory description. The instant disclosure often reads. 'it might be this; but, 'it might be that'; but 'it might be neither'. It appears that what 'blazes' are available for approaching the problem without the benefit of later provided blaze marks, i.e., applicants' Section 112 responses, appear to lead the ordinary artisan right off the trail and into a thicket of bushes. Therefore, examiner recognizes insufficient blaze marks to motivate the assembly of pending claim limitations as they are now claimed.

Notwithstanding, the scattering of teachings across multiple applications in the chain of continuity, under the facts of the instant application, constitute either (1) an affirmative concealment of the best mode of carrying out applicants invention (Randomex, Inc. v. Scopus Corp., 849, F.2d 585, 7 U.S.P.Q. 1050 (Fed. Cir.. 1988)), or (2) a total failure to be in possession at the time of filing of what is now claimed. Examiner finds (2) to *at least* be the instant case as explained above. However, *assuming arguendo* (2) is not the instant case, the following facts are substantiated for (1).

Considering pending claims of the group 6-235, assuming arguendo, that pending claims are supported 'through' the '87 disclosure so as to benefit from the '81 filing date even though

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applicants apparently have mistaken the '81 disclosure for the '87 disclosure. Moreover, assuming arguendo, that examiner has not mis-understood the alleged pending claim support, then the alleged pending claim support appears to have been hidden for reasons, inter alia, described above.

The very fact that applicants keep pointing to the parent '490 disclosure for demonstrating support to the instant disclosure in response to Section 112 rejections to the instant disclosure, is itself evidence of concealment.

Examiner does not find sufficient blaze marks in the woods, *he is lost*.

The *alleged pending claim support* tables are considered little to nothing more than attempts by to later provide what is *missing* from the '87 disclosure, even though it *might* have been present in '81.

However, examiner is prohibited, under Section 112's written description requirement, to use '81 for understanding '87, else Section 112 gets circumvented.

However, assuming arguendo, that the terms including, inter alia, 'data', 'digital', etc. can somehow meet (2)⁸, questions are raised as to whether applicants disclosed their best mode. The meanings and concepts of the terms 'data', 'digital', 'programming', etc., appear to have been hidden. In any event, the terms clearly evolved, often ambiguously, so they would not be recognized to convey the same concept in '87 as they might have in '81.

⁸Specifically, possession, Section 112's written description requirement.

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In summary under best mode, few to no blaze marks were provided for adequately marking the path in '87, per <u>Ruschig</u>.

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Pending claims of the group 6-235, are rejected under 35 U.S.C. 112, second paragraph, as failing to set forth the subject matter which applicant(s) regard as their invention.

Considering pending claims of the group 6-235, as applicants have apparently mistaken the parent '490 disclosure for the instant disclosure, pending claims are rejected for failing to claim the invention.

9. Pending claims of the group 6-235 using the terms having different descriptions from '81 and '87, are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicants regard as the invention.

Considering claims of the group 6-235 using terms having different descriptions, from '87 and '81. For example, when the '87 description is different so as to contradict the '81, it appears that the claim gets benefit only with respect to '87

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and the claim is constructed under the broadest reasonable interpretation standard with respect to '87 **only**. Likewise, when a term is elaborated upon and the claim modifies the term with '87 description, the term gets an '87 effective filing date.

However, it appears the Federal Circuit constructed the term 'information of a selected program unit' in claim 35 of '277, with respect to both descriptions in the '87 and the '81 specifications. See Personalized Media Communications, L.L.C. v.

International Trade Commission et al, Appeal No. 97-1532 (decided January 7, 1999).

While this might be appropriate when already a patent, and when Section 112 first paragraph was not in judicial review, the examiner maintains it is inappropriate before a patent in view of the preponderance of the evidence test for patentability under both the vague and indefinite prohibition of Section 112 second paragraph, and also Section 112 first paragraph. Hence, terms having different definitions from '87 to '81 are considered vague and indefinite, including the terms, inter alia, 'information', 'instruction', 'programming', 'program', 'data', 'digital', and derivatives of each term, etc. Applicants are respectfully requested to remove all claim terms from pending claims when their conceptual meanings are not identical for benefiting from '81 priority.

10. Pending claims of the group 6-235 using the terms, *inter alia*, 'program' and 'programming' derivatives thereof, are rejected under 35 U.S.C. 112, second

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paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicants regards as the invention.

The examiner notes that the original '87 C.I.P. disclosure of the present application defines the terminology "programming" differently than the '81 disclosure. Specifically:

- a) The Original disclosure of the present application explicitly defined the term "programming" to mean: "everything that is transmitted electronically to entertain, instruct, or inform including television, radio, broadcast print, and computer programming as well as combined medium programming" (see lines 5-8 on page 11 of the present written description); while in contrast
- b) The '81 disclosure explicitly defined the same terminology to mean:
 "everything transmitted over television or radio intended for communication
 of entertainment or to instruct or inform" (see lines 4-7 in the abstract of US
 patent 94,694,490).
- I. With respect to the terms "program" and "programming" as recited in the pending claims:
 - A) As it relates to the broadcast and transmission art, the term "program" is defined by the Second College Edition of the 'American Heritage Dictionary" to mean: "a scheduled radio or television show". This conventional definition

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of the term "program" seems to be consistent with applicants' use of the terminology throughout the '81 disclosure. However, this conventional definition is clearly inconsistent with the definition given to the term "programming" via the original disclosure of the present application (see the preceding paragraph of this Office action).

B) While applicants may be their or her own lexicographer, a term in a claim may not be given a meaning is, *inter alia*, repugnant to the usual meaning of that term, In re Hill, 161 F.2d, 367,73. U.S.P.Q. 482 (C.C.P.A. 1947). The examiner maintains that the use of the terminology "programming" and "program" in pending claims (enumerated above) is repugnant to what was the normal/usual use of the terminology. Appropriate correction is required.

Claim Rejections - 35 U.S.C. § 102

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international

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application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

12. Claims 6-235, are rejected under 35 U.S.C. 102(a,b,e) as being clearly anticipated by patents '490 and '725.

Considering claims 6-235, applicants allege they are fully supported by the '81 disclosure. Examiner incorporates by reference, into this rejection, all previous responses to Section 112 rejections, noting that applicants have apparently mistaken the '81 disclosure for the instant disclosure.

Claim Rejections - 35 U.S.C. § 103

- 13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

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14. Claims 6-235 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 89/02682.

Considering claims 6-235, to the extent that applicants can satisfy the enablement requirement of 112 1st but not the support requirement, a comparison has been made between a) the *alleged pending claim support* (Examiner incorporates by reference the *alleged pending claim support; see previous responses to Section 112 rejections*) and b) embodiments/processes taught in applicants' publication of March 23, 1989, by way of WO 89/02682. It is found, even if pending claims can be arrived at with less than undue experimentation, then it would most likely be from 'mixing and matching' the WO 89/02682 embodiments. And the ordinary artisan, to the extent that mixing and matching could have been done with undue experimentation, would have done so for the benefit of providing greater functionality to the subscriber.

15. Pending claims of the group, 6-235, that are directed to processes of controlling cable head end processes and monitoring of those processes and combined medium presentation, they are rejected under 35 U.S.C. 103(a) as being unpatentable over Greenberg U.S. patent 4,547,804 ('804) in view of Galumbeck et al U.S. patent no. 4,725,886 ('886).

Considering pending claims of the group, 6-235, that cover, *inter alia*, processes of controlling CATV head end process and apparatus and monitoring of

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those processes and combined medium presentation are suggested by '804. '804, suggests the claims that cover method and apparatus for identifying and verifying the proper airing of television broadcast programs wherein the television broadcaster can be assured that the programs were televised and received and properly aired at the scheduled time. '804 teaches utilizing pre-recorded or line video programs in which imprinted on a pre-selected scanning line is a digital encoded identifying number. These video programs with digital encoding are then distributed to network and local broadcast stations to be televised with this identification. A plurality of selected aired television channels are then automatically simultaneously monitored at a typical reception site whereby the encoded broadcast is appraised as to the quality of its audio and video, identified and timed, and which information is then stored for a later comparison to that which was actually intended to be aired. The illustration and written description for Figure 2 suggests, inter alia, the identification signal generator having all of memory means, detector means, video tape recorder, playback, and video tape recorder, and central computer, and processes thereof. The illustration and written description for Figure 2 suggests, inter alia, the broadcasting from the transmission station to the cable station and also suggests the monitor station and processes thereof. Notwithstanding, the switchable RF tuner, decoder, sequential storage, video channel switch, time generator, verification signal generator, and computer storage are suggested, inter alia, by Fig 3 and it's written description.

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Claimed subject matter directed to specific *data* and *other* programming sources, uses, and processes, that are not suggested by '804, are suggested by '886. For example, '886 suggests the claims that cover a communications system having an addressable receiver that is programmable, addressable, for receiving, storing, processing, and sending digital and conventional video audio and control signals for use in a cable video network. '886 suggests reception of audio and composite video and digital data received from various sources such as a satellite transponder and from local sources. The digital data may be processed into textual video data by character generation techniques, as may be other digital data received from a local keyboard, local weather sensors or other digital data interfaces. The receivers may be addressed in units or groups for purposes of receiving individually, locally or regionally tailored text information and are typically controlled simultaneously from one control source. The combination of '804 and '886, would have suggested the claimed invention to the ordinary artisan so as to be obvious, as motivation, inter alia, is found for the purpose of fulfilling the needs of data consumers throughout a large geographic area, and to have continual, current local and national information.

16. Pending claims of the group 6-235, that are directed to, *inter alia*, processes of controlling broadcast subscriber stations, including decrypting, processing, storing, generation, and monitoring of those processes and combined medium presentation,

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are rejected under 35 U.S.C. 103(a) as being unpatentable over Jeffers et al (U.S. patent no. 4,739,510)('510).

Considering pending claims of the group, 6-235, that are directed to, inter alia, processes of controlling broadcast subscriber stations, including decrypting, processing, storing, generation, and monitoring of those processes and combined medium presentation, they cover what '510 suggests...broadcast programming including, inter alia, audio and control signals that are digitized and inserted into the horizontal blanking interval of distributed television programming. The control signal are in the form of a data stream which incudes a header containing group address, sync, and programming information for receiving units, and a portions addressable to contain information for control of particular individual receiving units in an addressed group. Information is in the addressable portions and can be altered on a real time basis so system operator has direct control over certain functions of individual receiving units from the transmitting end. Figure 1 and it's written description disclosure, inter alia, a broadcast network having a computer, business center computer, voice response systems, monitor, controller, programming input, and video and audio channels to a program processing unit. There is disclosure of a satellite system, and a subscriber station having receiving apparatus and addressable decoding controller, and television display. Figure 2a,b and it's written description disclosure, inter alia, various processing circuitry and decryption circuitry for audio,

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memory, buffer, and related processes. Figure 3 and it's written description disclosure, inter alia, signal formatting with packets, headers, addressable bits, error correction bits, encryption, and other. Figure 4 and it's written description disclosure, inter alia, more signal formatting including sync and address information, program related information, impulse pay per view, checksum, program cost, program time, programming tier authorization, unique identification of programming, and various group and system addressing and processes using the signaling. Figures 5,6ab, and corresponding written description disclosure, *inter alia*, more signal formatting including message types having, authorization bit map, common audio key, home channel, as well as blocking bit map, call in time, telephone password, credit card password, overflow call in level, and also message time with subscriber addressing, and signature number used to select key fragments from subscriber signature key to decrypt, and encrypted message, and checksum. Figures 6c-e, and corresponding written description disclosure, inter alia, message types 3-5, having call in telephone number, alternate call in telephone no, channel assignment tables for first 8 and second 8 channel respectively, and process related thereto. Figures 6f-g and corresponding written description disclosure, inter alia, signal format for message types 6-7, having direct control of segments, control and reset, audio threshold, data threshold, zip code blackout, mask blackout, trap message bit for peripheral interphase, and peripheral device signatures a-b respectively. Figure 7, and

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corresponding written description disclosure, *inter alia*, subscriber station process for channel selection, decrypting, processing, unit address mapping, and storing decrypted information. Even though it appears, *inter alia*, that applicants may be reciting their claims so broadly that "local" generation of various programming can be combined with programming received from elsewhere to form a combined medium presentation for subsequent transmission to the subscriber station, examiner *only* finds support for the "local" generation to occur at the subscriber station and *not a station intermediate*. However, to the extent that there is support for the former mentioned "local" generation, even though it is not found, it would have been obvious, *inter alia*, to provide the system operator with greater control of the network.

17. Pending claims of the group, 6-235, that are directed to, *inter alia*, processes of controlling affiliate stations and processes and monitoring of those processes and combined medium presentation, they are rejected under 35 U.S.C. 103(a) as being unpatentable over Hazelwood et al (U.S. patent no. 4,025,851) ('851) in view of the publication "System and Apparatus for Automatic Monitoring Control of Broadcast Circuits" by Yamane et al, and the Australian Patent document No. 74,619 to Hetrich ('619).

Considering pending claims of the group 6-235, that are directed to, *inter alia*, processes of controlling cable head end processes and monitoring of those processes

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and combined medium presentation, '851 suggests the term 'processor' wherein the network station, the affiliate station, and the individual circuits which make up the network and affiliate stations, all function to process signals and hence are considered processors of a kind. '851, suggests television broadcast distribution processes and apparatus having a central broadcasting station represented by elements 10, 12, 14, and 22, and a network station including a source 10, of network television programming, wherein the network programming is distributed at 16 from the network station to a plurality of "local" affiliate television broadcast stations, and wherein the plurality of local affiliate broadcast stations receive, and selectively rebroadcast the network television programming wherein Figure 1 and it's written description discloses, inter alia, one of the suggested affiliate stations. Figure 3 and it's written description discloses, inter alia, structure of a typical broadcast distribution system having each of the plurality of affiliate stations of the distribution system; and having, a source of local programming 44, which consists of different television signal sources including video tape recorders, wherein some of the video tape recorders function to record portions of the received network programming such that the record network programming could be played back and broadcast at some future time thereby imparting a predetermined time to delay the local re-broadcast of the network programming (see lines 29-39 of column 4). There is also disclosed, inter alia, a television program selector 16, which receives the locally produced

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programming from the local programming source 44, and which selectively outputs one of the two types of programming for broadcast and for re-broadcast via a predetermined television channel transmitter 42. As suggested, inter alia, the affiliate station structure operates by: receiving network television programming from the network station 16; producing local television programming via local programming source 44; selecting recorded portions of the received network television programming, via tap recorder located within the local programing source, wherein a delay is imparted to the network programming prior to being reproduced and transmitted as part of said locally produced television programming (see 44 as described, inter alia, in lines 28-33, of column 3); selecting one of the received network programming and the locally produced television programming for broadcast and for rebroadcast of the selected programming to a plurality of subscribers over the predetermined television channel 42. '851 discloses a modification to the typical system with circuitry that enables a given network station of the system to monitor programming being broadcast and re-broadcast by the affiliate stations. '851 suggests, inter alia, enabling the network station to embed signals into the VBI of the network television programming that was being broadcast to the affiliate station referring to 12 and 14 of figure 1, so that the embedded codes (referring to figure 4) identify the programming being broadcast by title, source of origin, time of transmission (see, inter alia, lines 51-68 of column 5 and lines 1-5 of column 6). Moreover, '851

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suggested, for accomplishing the monitoring, allowing each affiliate station to have contained means (i.e. computer system 30, 32, 34, and 36, of figure 3) for monitoring and "logging" the television programming being broadcast from the affiliate station via the detection and monitoring of said embedded codes. The computer system at each of the affiliate station is operable to report the results of the monitoring and logging process to a remote station location such as the network station (i.e. to the centrally located host computer system 38 of figure 3). '851 suggests the embedded monitoring *instructions* codes as encoded and distributed by the television distribution system. The codes represent additional information encoded then embedded within the network television programming so that they could be broadcast downstream to the affiliate stations and local TV receivers. Figure 1 and it's written description disclosure, inter alia, a transmitter station receiving mass medium television programming signal from a network programming signal source (e.g. camera 10), wherein the mass medium programming signal, implicitly comprises audio (it's conventional). The figure 1 station, inter alia, receives instruction signals used for generating the monitoring codes which were generated at figure 1 12, e.g., wherein the generated monitoring codes (see figure 4) were then embedded into the mass medium programming via a summing circuit 14 of figure 1 for communication to the affiliate station (e.g. "Network outlets"). The network feed 16 of figure 1 corresponds to means for performing communication programming to a storage

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device in that the network feed communicates mass medium programming to the affiliate station where it is selectively received and recorded by a VTR (e.g. storage device), for delayed re-broadcast. The monitoring codes are embedded into the mass medium programming so as to have occurred during one ore more horizontal lines of the vertical blanking interval of the mass medium programming. At the encoder 12 of figure 1, has to have been controlled so as to communicate the monitoring codes to the summing circuit 14 at "selected" times in view that the monitoring codes were carried through the line at the selected time in which they were provided to summing circuit 14. The described VTR corresponding to various recited storage medium, stores the monitoring codes along with the mass medium programming and therefore comprises means for performing storing of programming signal and instruct signal at a storage device. Pending claims of the group, 6-235, that are directed to, inter alia, processes of controlling cable head end processes and monitoring of those processes and combined medium presentation, not suggested by '851, are further suggested bu Yamane et al and '619. Yamane et al disclose a television broadcast system for embedding network monitoring codes within a given line of VBI of the broadcast "mass medium" programming. Yamane et al also disclosure, inter alia, embedding control signals into a second/different line of VBI of the television programing so as to provide additional control over the flow of the television programming through the downstream affiliate stations. '619 suggest a radio and television broadcast system

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in which control signals are embedded in the network radio/television programming for the purpose of controlling the flow of the radio/television programming through the plurality of affiliate stations. Hetrich discloses, inter alia, embedding control signals used for identifying the portions of the network programing which are to be recorded by the storage device of the affiliate stations for delayed re-broadcast. Because Yamane et al suggest that it is desirable to have monitoring codes and control codes within different scan lines of the same network television programming broadcast for providing respective control over monitoring and controlling functions of the television broadcast system; and because Yamane et al suggest implementing the circuitry needed to simultaneously encoded and embed two types of codes into the same TV broadcast (see figure 6.8 on page 71 of the translation), examiner concludes that it would have been obvious to have modified the encoder 12 of '851 to receive "control signals", e.g. in addition to "monitoring signals" already described by '851, and to have simultaneously encoded and embedded and received control signals and received monitoring signals into the same network television signal via summing circuit 14, e.g. the embedding of the signals inherently takes place at selected times which are determined by the location of horizontal lines into which said encoded signals were embedded. Taken together, these monitoring signals, and control signals correspond to instruction signals. '619 suggest embedding control codes of the type found in the above described modified '851 system, for controlling and automating

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the recording of selected portions of received network programming at the affiliate stations. By controlling the affiliate stations to record the portions of network programming for delayed broadcast, the control codes are effective to instruct the affiliate station to delay the network programming for some selected period of time. Hence, in view of '851 disclosure, examiner concludes it would have been obvious to one skilled in the art to have used the control codes/signals in the modified system of '851 for controlling and hence automating the '851 disclosed means for recording of the selected portions of network television programming at the affiliate stations.

18. Pending claims of the group, 6-235, that are directed to, *inter alia*, processes of controlling subscriber station processes and monitoring of those processes and of combined medium presentation and processes, are rejected under 35 U.S.C. 103(a) as being unpatentable over either one of the common subject matter suggested by Campbell et al (WO81/02961, aban. Parent Appl. No. 135,987; U.S. patent 4,536,791))('791 is specifically referenced for convenience) in view of at least one or more of: Breeze "Television Line 21 Encoded Information And It's Impact on Receiver Station Design"; Schnee (U.S. patent no. 4,290,142) ('142); and Zaboklicki (DE 2,904,891)('891).

Regarding Campbell et al: the PCT publication date, noted on the front page of Campbell et al is October 15, 1981. For this reason, Campbell et al are considered

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a 102a reference. However, the effective priority of the material sourced for purposes of this rejection dates to the filing of the corresponding abandoned C.I.P. grant parent application no. 135,987, filed March 31, 1980. What was added in the C.I.P. of issue, is disclosure corresponding to Figures 2a, b, and 14-17 of the '791 patent. Because, the rejection herein relies on Fig's 1, 2, and 3-13, and corresponding written description and not Fig.'s 2a, b, and 14-17, the effective filing date of the teaching subject matter relied upon for this rejection in the '791 patent is March 31, 1980. A copy of the abandoned grand parent was provided in application 08/468,641.

Considering pending claims of the group, 6-235, that cover, *inter alia*, processes of controlling subscriber station processes and monitoring of those processes and of combined medium presentation and processes that are suggested by Campbell et al. Campbell et al suggest the claims that cover an addressable cable television control system controlling television program and data signal transmission from the cable head end to the subscriber stations. The data signals include control and text embedded in the vertical blanking interval. There is also suggested full channel Teletext data in video line format which may be transmitted on dedicated text channels with the modification of only head end processors. There are intelligent converts at the subscriber locations for using the data signals to control access to the system on the basis of channel, tier, of service, special event and programming. The converter uses graphic display generator for generating display signals for the

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combined medium presentation of text data on the television receiver and for generation of predetermined messages for viewer concerned access, emergences, and other functions. The converter processes text data, and selected full channel text data transmitted in video line format. The keyboard of the subscriber provides different functional inputs for interfacing with the system. The converter is interactive two way for data acquisition and control. Figure 1 and it's written description suggest, inter alia, the central data control at cable head end, and the combination of control signals, instruction signals, audio programming, video programming. There is also disclosed addressable converter and at the subscriber station having input. Figure 2 and it's written description suggest, inter alia, formatting at the cable head end of data receiver from data sources, and various addressing control apparatus and processes. Figure 2a-b and corresponding written description disclose, inter alia, the packet length, and features of the video field line layout. Figure 3 and corresponding written description disclose, inter alia, clocking control, local input, data storage, and floppy disk storage medium, printer, generation of control data, connection to remote control, and additional console inputs, and remote terminal and processes therefore. Figure 4 and corresponding written description disclose, inter alia, digital control and timing and processing and scrambling at the head end and processes thereof. Figure 6 and corresponding written description disclose, inter alia, various subscriber station method and apparatus for receiving programming, tuning programming, detecting

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programming, local inputting, descrambling and decrypting, memory, various input means, and various methods and processes therefore. Figure 7 and corresponding written description disclose, inter alia, the generation of graphics and video,, and memory means, and processor means, and processes thereof. Figure 8 and corresponding written description disclose, *inter alia*, level transition, analog comparator, and processes for vertical interval data extraction, and generation, and processing, for presenting. Figure 9-10 and corresponding written description disclose, inter alia, subscriber station head end converter and television, remote control, and security monitoring, and processes therefore. Figure 11 and corresponding written description disclose, inter alia, data structure, for control signals, and instruction signals, for control of the subscriber station and for control of processing and for control of monitoring, and for control of combined medium presentation. Figure 12 and corresponding written description disclose, inter alia, processing and generation of combined medium presentation for audio, video, graphics, and subscriber input, descrambling, and processing. Claims that cover processes of controlling subscriber station processes and monitoring of those processes and of combined medium presentation and processes that are not suggested by Campbell et al are suggested by Breeze. For example, Breeze suggests a system for transmission of accurate time information during the vertical interval and of standard television broadcasts. The disclosure suggests implementation of digital

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tuning, test signaling, facsimile, and other uses for transmission of digital encoding. Figure 1 and it's written description disclose, *inter alia*, generation of timing information. Figure 2 and it's written description disclose, inter alia, code format having bits for identifying information type to follow, such as time, and text, and bits containing time data, and channel codes. Figure 4 and it's written description disclose, inter alia, process and method for detecting codes and decoding various signaling. Figure 5 and it's written description disclose, *inter alia*, process and method for numeric generation of time and channel display. Figures 6-7 and written description disclose, inter alia, process and method for timing utilizing encoded channel identification. Figure 8 and it's written description disclose, inter alia, process and method for digital channel comparison and storing, and the column prior to the conclusion suggests automatic programming and automatic tuning. Claims that cover processes of controlling subscriber station processes and monitoring of those processes and of combined medium presentation and processes that are not suggested by Campbell et al and are not suggested by Breeze, are suggested by '142. For example Schnee suggests, inter alia, an interactive cable television system having combined medium presentation of data, audio, and video, which has been transmitted on different channels of time, space, and frequency (see second to last paragraph). '142 suggests combined medium presentation of a locally generated image with video. There is also suggested a combined medium presentation of data and video.

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And there is also suggested combined medium presentation of radio and television. Claims that cover processes of controlling subscriber station processes and monitoring of those processes and of combined medium presentation and processes that are not suggested by Campbell et al and are not suggested by Breeze, are not suggested by '142, are suggested by '891. For example, '891 suggests, inter alia, the combined medium presentation and processing therefore, including the display of portions of graphic presentation. Pending claims therefore covering combined medium presentation of data and video would have been obvious, *inter alia*, for providing cable subscribers with enhanced interactive processes including enhancing conventional entertainment, providing useful information, and offering greater control to the cable head end operators.

19. Pending claims of the group, 6-235, that are directed to, *inter alia*, either processes of controlling *affiliate* stations and processes and monitoring of those processes and combined medium presentation or processes of controlling *subscriber* stations and method and process for monitoring and providing combined medium presentations, or both, that fall out each particular determined group members of the group of claims described in rejection above, the groups are *provisionally* rejected further in view of one or more of:

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-Hazelwood et al (US. Patent No. 4,025,851);(see reasoning and level of skill at '81 as discussed in rejection below and above);

- -The publication "System and Apparatus for Automatic Monitoring Control of Broadcast Circuits" by Yamane et al;(see reasoning and level of skill at '81 as discussed in rejection below and above);
- -Australian Patent document No. 74,619 to Hetrich; (see reasoning and level of skill at '81 as discussed in rejection below and above);
- -"A Public Broadcaster's View of Teletext in the United States", Gunn; (see discussion and reasoning given below);
- -Master Control Techniques" by Marsden vol 9 of the "Journal of the Television Society", '59; (see reasoning and level of skill at '81 as discussed in rejection below and above);
- -"The Automation of Small Television Stations" by Young et al vol 80 of the "Journal of the SMPTE", Oct. '71; (see reasoning and level of skill at '81 as discussed in rejection below and above);
- -U.S. Patent 3,761,888 to Flynn; (see reasoning and level of skill at '81 as discussed in rejection below);
- -U.S. Patent 3,627,914 to Davis; (see reasoning and level of skill at '81 as discussed in rejection below);

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-"Microprocessor For CATV Systems" by Tunmann et al;;(see reasoning and level of skill at '81 as discussed in rejection below);

- -U.K. Patent 959,374 to Germany; (see reasoning and level of skill at '81 as discussed in rejection below);
- -"Automatic Control of Video Tape Equipment at NBC, Burbank", by Byloff,
- '59; (see reasoning and level of skill at '81 as discussed in rejection below);
- -"Video Banks Automate Delayed Satellite Programming", by Chiddix,
- '78; (see rejections below);
- -"The Digitrol 2 ~ Automatic VTR Programme Control", by Skilton, pages 60-61, of -"International Broadcast Engineer", 3/81;(see reasoning and level of skill at '81 as discussed in rejection below);
- -CATV Program Origination and Production, by Schiller et al, '79 (see 892); (this reference merely sets forth, *inter alia*, in one place and in laymen terms, what the level of skill in the art rejection above does in technical terms; so to the extent the above/below rejection is too technical with respect to level of skill in the art at '79, the level is described herein in laymen terms for purpose of clarity);
- -Television Production Handbook, by Zettl, Second Edition, '69; (see reasoning and level of skill at '81 as discussed in rejection below);

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-Vikene, WO 80/02093; (Vikene suggests, *inter alia*, a method of transmitting from a broadcaster in addition to the information signal remote control signals, in order to on the receiving side, corresponding to announced programs from the broadcaster which are provided with coded markings, to effect recording of the information on a tape or video recorder. Which markings are also recorded and the recorder is programmable in accordance with the announced programs, so as to be reproduced at a desired time using the recorded markings and the program set in the recorder to sort out the desired information and standard stop the recorder; hence to the extent the above and below discussions do not address the particular determined group members of the group of claims, and to the extent the difference is met with the above Vikene disclosure, it would have been obvious to one having ordinary skill in the art for the convenience gained in the recording of the information on a tape or video recorder);

- -Greenberg U.S. patent 4,547,804; (see rejections above considering the benefit of greater network operator control);
- -Jeffers et al U.S. patent 4,739,510; (see rejections above considering the benefit of the ability to, *inter alia*, decrypt and hence secure programming);
 -"Electronic Image and Tone Return Equipment With Switching System and

Remote Control Receiver for Television Decoder" by Werner Diederich DT

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23 56 969 A1; (Diederich suggests, *inter alia*, an electronic image and tone return equipment with switching system and remote control receiver for television decoder. hence to the extent the above and below discussions do not address the particular determined group members of the group of claims, and to the extent the difference is met with the above Diederich disclosure, it would have been obvious to one having ordinary skill in the art for the convenience gained);

- -Campbell et al WO81/02961; to the extent that the above and below do not address this group of claims and to the extent that Campbell et al do (see above), it would have been obvious for the benefits described above including, *inter alia*, enhanced subscriber station services);
- -Campbell et al Aban. Parent Appl. No. 135,987; (same as WO81/02961);
- -Campbell et al U.S. patent 4,536,791('791); (same as WO81/02961);
- -"Automatic Storage and Retrieval of Videotaped Programs", by Kazama et al, 4/79; (Kazama et al suggests, *inter alia*, a fully automatic storage receive of Videotaped Programs that is computer controlled, so as to constitute tapetraffic and handling system. hence to the extent the above and below discussions do not address the particular determined group members of the group of claims, and to the extent the difference is met with the above Kazama

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et al disclosure, it would have been obvious to one having ordinary skill in the art for the convenience gained);

-"Code accompanying TV program turns on video cassette recorder in proposed scheme", by J Gosch, vol 54 no. 3, February 10, 1981; (Gosch teach, inter alia, code accompanying TV programming for turning on a video cassette recorder for delayed or altered schedule programming; as well as for unscheduled broadcasts and for alerting emergencies and providing updates. Hence, to the extent the above and below discussions do not address the particular determined group members of the group of claims, and to the extent the difference is met with the above Gosch disclosure, it would have been obvious to one having ordinary skill in the art for the convenience gained); -"An Automated Programming Control System For Cable TV", by Stern (80); (Stern suggests, inter alia, an automated programming control system for Cable TV having a machine control interface unit containing special circuits for sensing control track pulses, so the system can accurately search for different program material and commercials recorded on one tape; also there is suggested pre-roll of a tape to a specific program; and rewind to a previous segment...so as to "essentially" be "random-access" to the contents of the video tape, under full system control. Hence to the extent the above and below discussions do not address the particular determined group members of the

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group of claims, and to the extent the difference is met with the above Stern disclosure, it would have been obvious to one having ordinary skill in the art for the convenience);

- -"Television Line 21 Encoded Information and It's Impact on Receiver Design", Breeze, Nov. '72; (see rejection above. Hence, to the extent that the above and below discussions do not suggest the particular determined group members of the group of claims, and to the extent that it is met by Breeze (see above) it would have been obvious for the convenience gained);
- -"Automatic Switching in the CBC An Update" by M.W.S. Barlow (Sept. 76); (suggests, *inter alia*, *network controlled* automatic switching process.

 Hence, to the extent that the above and below discussions do not suggest the particular determined group members of the group of claims, and to the extent that it is met by the Barlow disclosure, it would have been obvious for the convenience gained);
- -"Transmission no Alphanumeric Data by Television", by Millar et al 1 370 535, GB-1974-10; (see discussion and reasoning below);
- -Galumbeck et al (U.S. patent no. 4,725,886); (to the extent that the above and below discussion does not suggest the particular determined group members of the group of claims, and to the extent that the difference is met by Galumbeck et al, it would have been obvious for the convenience gained);

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-CBS/CCETT North American Broadcast Teletext Specification, 5/81; (suggests, *inter alia*, captioning transmitted to a decoder for superimposing over the program video at a pre-designated time, and selecting a classification of captions so as to be displayed over program video. Hence, to the extent that the above and below do not suggest the particular group of claims and to the extent it is met by the CBS/CCETT disclosure, it would have been obvious for the convenience gained);

- -Zaboklicki (DE 2,904,891); (to the extent that the discussion above and bellow does not suggest the particular determined group members of the group of claims, and to the extent it is met bo Zabolicki, it would have been obvious for the benefit of the convenience gained);
- -Nagel (U.S. patent no. 4,064,490); (suggests, *inter alia*, methods and apparatus for the reception, and processing of computer applications. Hence to the extent the above and below discussions do not address the particular determined group members of the group of claims, and to the extent the difference is met with the above Zaboklicki disclosure, it would have been obvious for the benefit of the convenience gained);
- -Kakihara et al (U.S. patent no. 4,251,691);(suggests, *inter alia*, a center-toend type information service system utilizing the public telephone networks that are fundamental communication media of nation-wide scale in which

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desired information is requested from the terminal side to the center by means of a telephone set of keyboard and then delivered to and received by a TV receiver, wherein a part of the center functions is transferred together with the exchange function to a subscriber located near the terminal so that the length transmission path connecting the center to terminals becomes shorter and the cost of the whole system can be reduced. Hence, to the extent the above and below discussions do not address the particular determined group members of the group of claims, and to the extent the difference is met with the above Kakihara disclosure, it would have been obvious to one having ordinary skill in the art for the convenience gained);

- -Hedger et al (Telesoftware-Value Added Teletext); (suggests, *inter alia*, broadcast software and subscriber station computing apparatus having input and output device for interactive user applications. Hence, to the extent the above and below discussions do not address the particular determined group members of the group of claims, and to the extent the difference is met with the above Kakihara disclosure, it would have been obvious to one having ordinary skill in the art for the convenience gained);
- -"The Vertical Interval: A General-Purpose Transmission Path", Ted V. Anderson; (See discussion and reasoning below);

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"A Public Broadcaster's View of Teletext in the United States", Gunn; (see discussion and reasoning given below);

-"Automatic Program Recording System, Gaucher, '75; (suggests, *inter alia*, an automatic program recording system. Hence, to the extent the above and below discussions do not address the particular determined group members of the group of claims, and to the extent the difference is met with the above Gaucher disclosure, it would have been obvious to one having ordinary skill in the art for the convenience gained);

-U.S. patent 4,290,142, to Schnee et al (to the extent that the above and below discussion does not suggests the particular determined group members of the group of claims, and to the extent that Schnee et al do, it would have been obvious for the benefit of the convenience gained).

For example, to the extent that pending claims of the group, 6-235, that are directed to, *inter alia*, processes of controlling cable head end processes and monitoring of those processes and combined medium presentation, and controlling subscriber station processes and monitoring of those processes, and for combined medium presentation, are not suggested by the above, they cover subject matter known as the '81 level of skill in the art (11/3/81) so that the combination would be obvious for implementing, *inter alia*, what was well known for the benefit of

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efficient means with which to operate and control said network. The following discussion is provided to establish the 'level of skill in the art' which existed at the time of applicants' alleged invention ('81), such skill level sets forth the context in which the applied art of record must be reviewed:

1. The examiner notes that local television broadcast stations, which only served small regional areas of a country (e.g. the USA), often lacked the financial resources required to create enough original television programing to fill their daily broadcast schedules. Thus, these local television stations became "affiliates" of a national television broadcast network (e.g. NBC, ABC, CBS, etc,...) whereby the national television network created original network television programming which could be transmitted to, and commonly rebroadcast by, all of the local affiliate stations. This arrangement allowed the cost of creating such original programming to be divided amongst the affiliate stations thereby reducing the cost to any one of the affiliates.9

⁹See, the first 23 lines In the full paragraph on page 85 of the article "Master Control Techniques" by <u>Marsden</u> which was published in volume 9 of the "Journal of the Television Society" in 1959.

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2. While, in practice, it was feasible to fill the affiliate stations' entire local broadcast schedules with network programming, such was known not to have been desirable. Specifically, there still remained a need to supplement said network programming with locally originated programming tailored specifically to the needs and interests of the local audiences (e.g. local news programs, local commercials, etc,...). 10

3. To accomplish the above, an arrangement was established in which a national broadcast station would broadcast network programming to all of it's affiliate stations in accordance with a strict network broadcast schedule. This strict network broadcast schedule included scheduled "breaks" in the network programming which were then made available to the local affiliate stations for the purpose of inserting locally originated programming.¹¹ This locally originated

¹⁰ Note the first 23 lines in the second full paragraph of page 85 of the article "Master Control Techniques" by <u>Marsden</u> which was published in volume 9 of the "Journal of the Television Society" in 1959.

Note: lines 2-9 in the second column on page 806 of the article "The Automation Of Small Television Stations" by <u>Young et al</u> which was published in volume 80 of the "Journal of the SMPTE" in October of 1971.

¹¹ Note the last 11 lines on page 810 of the article ... "The Automation Of Small Television Stations" by <u>Young et al</u>, which was published in volume 80 of the "Journal of the SMPTE" on October of 1971.

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programming was known to have included previously broadcast network programming which had been recorded for delayed rebroadcast.¹² The resulting combined programming was then broadcast to the local audiences of the affiliate stations.

- 4. Early on, the local affiliate stations produced and inserted their own local programming into the network programming via a switching network which was controlled manually by local technicians.
 However, as technology progressed, methods for automating various aspects of the program insertion/switching process developed Such developments included:
 - 1) The development of automatic scheduling computers which could be programmed to execute a list of scheduled programming events whereby the list of events automatically controlled tile sequence in which scheduled programming was produced and broadcast from a

¹² See lines 25-41 in column 4 of U.S. Patent 4,025,851 to <u>Hazelwood et al</u>. which was published on May 24, 1977.

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respective broadcast. Such computers were used to automate both the network television stations and affiliate television stations .¹³

2) The development of automated program cuing systems which include: equipment located at the national network for embedding cuing signals into the broadcasted network programming whereby said cuing signals identified the beginning and the end of each scheduled "break" in network programming, and equipment located at the affiliate stations which used the embedded cuing stations to determined the respective beginning and the respective end of each scheduled network "break" and, based on this determination, automatically cause its own—scheduled local programming to be inserted into said "breaks" prior to "re-broadcast". 14

¹³ Note: the last 11 lines on page 810 of the article "The Automation Of Small Television Stations" by Young et al. which was published in volume 80 of the "Journal of the SMPTE" in October of 1971.

Note: U.S. Patent # 3,761,888 to Flynn which was published on 9/25/73.

Note: U.S. Patent #3,627,914 to Davies which was published on 12/14/71.

Note: the publication "Microprocessor For CATV Systems" by Tunmann et al. Which was Published by the Tele-Engineering Corp on 4/30/1978.

¹⁴ See: Australian Patent Document S.N. 074,619 by <u>Hetrich</u> which was published April 29, 1976.

See: U.K. Patent Document S.N. 959,374 by <u>Germany</u> which was published May 27, 1964.

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5. Because ones of the affiliate stations were located in different time zones, equipment was required to compensate the broadcasted network programming for these tine zone differences, i.e. if the same network programming was to have been broadcasted at the same local time throughout the entire country. This compensation was accomplished by delaying the broadcasted network programming which was provided to a given one of the affiliate stations, via a network of recording devices, as a function of the time zone in which the given affiliate station was located. Early on, due to the high cost of this delay equipment, compensation was provided only at the central network station. But subsequently, as the cost of the delay equipment came down and as the use of highly expensive satellite transmission paths increased, said delay equipment began be located within ones of the affiliate station locations. In either of these situations, when

¹⁵ Note the article "Automatic Control of Video Tape Equipment at NBC, Burbank" by Byloff which was published by the National Broadcasting Company, Inc. in 1959.

¹⁶See: the publication "Video Banks Automated Delayed Satellite Programming" by Chiddix which was published in 1978.

See: the publication "The Digitrol 2 ~ Automatic VTR Programme Control" by <u>Skilton</u> which was published on pages 60-61 of the "International Broadcast Engineer" in March of 1981.

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network programming was to be delayed in this manner, it was understood that any "program related data" that was carried with the network programming (e.g. such as the network cueing signals, network program monitoring codes; etc,...) also had to be delayed by the delay equipment in order to have maintained the precise timing relationship of such program related data with the said network programming.¹⁷

Moreover, consider the state of television before the parent '81 disclosure...

The following discussion has been provided to emphasize the state of the television/radio broadcast art which existed at the time of applicants' alleged invention and, therefore, to further exemplify the context in which the applied prior art of record must be viewed. Support for this discussion is derived from the following prior art: 1) the publication "System and Apparatus for Automatic Monitoring Control of Broadcast Circuits" by <u>Yamane et al</u>; 2) the Australian Patent document No. 74, 619 to Hetrich; 3) the publication "The Vertical Interval: A

Note: lines 25-41 in column 4 of U.S. Patent 4,025,851 to <u>Hazelwood et al.</u> which was published on May 24, 1977.

¹⁷See: the first 7 lines in the first full paragraph of the third column on page 39 of the publication "Video Banks Automate Delayed Satellite Programming" by <u>Chiddix</u> which was published in 1978.

Note: U.S. Patent 4,025,851 to <u>Hazelwood et al</u>. Which was published on May 24, 1977.

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General-Purpose Transmission Path" by <u>Anderson</u>; and 4) the British patent document No. 959,274 to <u>Germany</u>.

A) Contrary to the arguments presented by applicants in co-pending applications (e.g.S.N. 113,329)¹⁸, it is maintained that the body of art pertaining to the broadcast of television programming the body of art pertaining to the broadcast of radio programming were, and still are, analogous arts. To suggest otherwise is to portray an unrealistically low level of skill in the art. The following fats provide evidence as to the analogous nature of these two arts:

1. First, it is noted that radio programming and television programming were communicated through radio and television distribution networks in the same basic way/format. More specifically, both radio/television distribution networks operated to produce, sequence and distribute radio/television programming to a plurality of household `radio/television receivers based on predetermined radio/television broadcast schedules. In fact, the definition of the word program, as it

¹⁸The Examiner notes that application S.N. 113,329 has already been cited in the record and therefore its citation by Examiner herein is not prohibited.

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pertains to the broadcast environment, was/is: "a scheduled radio or television show".

2 By the fact that the actual configurations of the radio and television networks themselves mirrored each other element for element. For example, both systems comprised national/network stations and affiliated local/regional stations wherein the local/regional stations operated to selectively rebroadcast network programming, or to broadcast locally produced programming in place of the network programming, to said household receivers. Almost the only difference between the configurations of the radio and television networks was that the circuitry needed to implement the television network was of a greater bandwidth than that of the radio network (e.g. the television network used VTRs in places where the radio network used ATRs);

3. By the fact that the prior art of record shows that, at the time of Applicants' alleged invention, those of ordinary skill in the art themselves understood radio/television distribution networks to be "analogous arts". For example, this fact is

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clearly reflected in the teaching of <u>Hetrich</u> that his disclosed control signal distribution circuitry, while described in detail with respect to radio broadcast networks, could likewise have been used within television broadcast networks (see: the first 4 lines on page 2 of the <u>Hetrich</u> document).

B) Television and radio broadcast networks, which comprised a plurality of local/regional broadcast stations affiliated with a respective central/national broadcast station, were notoriously well known in the art at the time of applicants' alleged invention. The central/national broadcast station of these broadcast networks operated to create national television/radio programming and to broadcast said created programming to ones of its affiliate broadcast stations. Said ones of the affiliate stations received the broadcasted network television/radio programming and then either rebroadcast said received network programming or broadcast locally produced commercials/programs in place of said received network programming. The programming that was broadcast from the ones of the affiliate stations were received by a plurality of television receivers located at the households within the local region served by the affiliates, and/or were received and processed by additional ones of said affiliate stations.

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C) In order to 1) reduce the operating costs of said television and radio broadcast networks, 2) eliminate man made errors in said television and radio networks; and 3) increase the efficiency in flow of programming in said television and radio networks (i.e. the "motion functions"), it became a desirable trend in the television/radio broadcast industries to have "automated" as much of the broadcast network process as was economically beneficial; e.g. where the term "automated" referred to the unmanned operation of network processes by machines instead of station personal (note lines 7-22 on page 5 of the <u>Yamane et al</u> translation). Early on, the process that was targeted for automation involved: the monitoring of broadcast programming for the purpose of determining faults/failures in the network; the monitoring of broadcasted programming for the purpose of determining subsequent program switching opportunities; the control of program flow and switching according to "confirmed program schedules"; etc, ... (note lines 9-18 on page 6 of Yamane et al translation).

D)One notoriously well known way of automating many of the processes performed by television/radio networks, was through the use of embedded "identification information signals" and "control information signals" within

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the broadcast network programming such that said embedded signals were used to monitor and identify the network programming being broadcast and were used to provide control over program switching operations of said affiliate stations (note lines 1-6 on page 2 of the Yamane et al translation; lines 11-27 on page 13 and lines 1-21 on page 14 of the Yamane et al translation; lines 16-23 on page 15 of the <u>Yamane et al</u> translation; the last six lines on page 18 of the Yamane et al translation; figure 1 of Hetrich; lines 1-10 on page 2 of Hetrich; the last 9 lines on page 10 of Hetrich; the abstract on page 77 of Anderson; and the first full paragraph under the heading "Introduction" on page 77 of Anderson). It is noted that at least the publication of Anderson recognized the fact that the versatility of this type of system automation could be greatly expanded if the embedded signals were capable of being addressed to a specific ones, and/or to specific ones, of the affiliate stations (note: the first three lines under the heading "Applications" on page 80 of Anderson; and lines 1-12 under the heading "Conclusion" on page 82 of Anderson).

Double Patenting

20. Conflicts exist between claims of the following related co-pending applications which includes the present application:

| # | Ser. No. | # | Ser. No. | #Ser. | No. |
|------|----------|----|----------|-------|--------|
| 1 | 397371 | 2 | 397582 | 3 | 397636 |
| 4 | 435757 | 5 | 435758 | 6 | 437044 |
| 7 | 437045 | 8 | 437629 | 9 | 437635 |
| 10 | 437791 | 11 | 437819 | 12 | 437864 |
| . 13 | 437887 | 14 | 437937 | .15 | 438011 |
| 16 | 438206 | 17 | 438216 | 18 | 438659 |
| 19 | 439668 | 20 | 439670 | 21 | 440657 |
| 22 | 440837 | 23 | 441027 | 24 | 441033 |
| 25 | 441575 | 26 | 441577 | 27 | 441701 |
| 28 | 441749 | 29 | 441821 | 30 | 441880 |
| 31 | 441942 | 32 | 441996 | 33 | 442165 |
| 34 | 442327 | 35 | 442335 | 36 | 442369 |
| 37 | 442383 | 38 | 442505 | 39 | 442507 |
| 40 | 444643 | 41 | 444756 | 42 | 444757 |
| 43 | 444758 | 44 | 444781 | 45 | 444786 |
| 46 | 444787 | 47 | 444788 | 48 | 444887 |
| 49 | 445045 | 50 | 445054 | 51 | 445290 |
| 52 | 445294 | 53 | 445296 | 54 | 445328 |
| 55 | 446123 | 56 | 446124 | 57 | 446429 |
| | | | | | |



| 58 | 446430 | 59 | 446431 | 60 | 446432 |
|-----|--------|-----|--------|------------|--------|
| 61 | 446494 | 62 | 446553 | 63 | 446579 |
| 64 | 447380 | 65 | 447414 | 66 | 447415 |
| 67 | 447416 | 68 | 447446 | 69 | 447447 |
| 70 | 447448 | 71 | 447449 | 72 | 447496 |
| 73 | 447502 | 74 | 447529 | 75 | 447611 |
| 76 | 447621 | 77 | 447679 | 78 | 447711 |
| 79 | 447712 | 80 | 447724 | 8 1 | 447726 |
| 82 | 447826 | 83 | 447908 | 84 | 447938 |
| 85 | 447974 | 86 | 447977 | 87 | 448099 |
| 88 | 448116 | 89 | 448141 | 90 | 448143 |
| 91 | 448175 | 92 | 448251 | 93 | 448309 |
| 94 | 448326 | 95 | 448643 | 96 | 448644 |
| 97 | 448662 | 98 | 448667 | 99 | 448794 |
| 100 | 448810 | 101 | 448833 | 102 | 448915 |
| 103 | 448916 | 104 | 448917 | 105 | 448976 |
| 106 | 448977 | 107 | 448978 | 108 | 448979 |
| 109 | 449097 | 110 | 449110 | 111 | 449248 |
| 112 | 449263 | 113 | 449281 | 114 | 449291 |
| 115 | 449302 | 116 | 449351 | 117 | 449369 |
| | | | | | |

| 118 | 449411 | 119 | 449413 | 120 | 449523 |
|-----|--------|-----|--------|-----|--------|
| 121 | 449530 | 122 | 449531 | 123 | 449532 |
| 124 | 449652 | 125 | 449697 | 126 | 449702 |
| 127 | 449717 | 128 | 449718 | 129 | 449798 |
| 130 | 449800 | 131 | 449829 | 132 | 449867 |
| 133 | 449901 | 134 | 450680 | 135 | 451203 |
| 136 | 451377 | 137 | 451496 | 138 | 451746 |
| 139 | 452395 | 140 | 458566 | 141 | 458699 |
| 142 | 458760 | 143 | 459216 | 144 | 459217 |
| 145 | 459218 | 146 | 459506 | 147 | 459507 |
| 148 | 459521 | 149 | 459522 | 150 | 459788 |
| 151 | 460043 | 152 | 460081 | 153 | 460085 |
| 154 | 460120 | 155 | 460187 | 156 | 460240 |
| 157 | 460256 | 158 | 460274 | 159 | 460387 |
| 160 | 460394 | 161 | 460401 | 162 | 460556 |
| 163 | 460557 | 164 | 460591 | 165 | 460592 |
| 166 | 460634 | 167 | 460642 | 168 | 460668 |
| 169 | 460677 | 170 | 460711 | 171 | 460713 |
| 172 | 460743 | 173 | 460765 | 174 | 460766 |
| 175 | 460770 | 176 | 460793 | 177 | 460817 |
| | | | | | |

| 178 | 466887 | 179 | 466888 | 180 | 466890 |
|------|--------|-----|--------|-----|--------|
| 181 | 466894 | 182 | 467045 | 183 | 467904 |
| 184 | 468044 | 185 | 468323 | 186 | 468324 |
| 1.87 | 468641 | 188 | 468736 | 189 | 468994 |
| 190 | 469056 | 191 | 469059 | 192 | 469078 |
| 193 | 469103 | 194 | 469106 | 195 | 469107 |
| 196 | 469108 | 197 | 469109 | 198 | 469355 |
| 199 | 469496 | 200 | 469517 | 201 | 469612 |
| 202 | 469623 | 203 | 469624 | 204 | 469626 |
| 205 | 470051 | 206 | 470052 | 207 | 470053 |
| 208 | 470054 | 209 | 470236 | 210 | 470447 |
| 211 | 470448 | 212 | 470476 | 213 | 470570 |
| 214 | 470571 | 215 | 471024 | 216 | 471191 |
| 217 | 471238 | 218 | 471239 | 219 | 471240 |
| 220 | 472066 | 221 | 472399 | 222 | 472462 |
| 223 | 472980 | 224 | 473213 | 225 | 473224 |
| 226 | 473484 | 227 | 473927 | 228 | 473996 |
| 229 | 473997 | 230 | 473998 | 231 | 473999 |
| 232 | 474119 | 233 | 474139 | 234 | 474145 |
| 235 | 474146 | 236 | 474147 | 237 | 474496 |
| | | | | | |

| 238 | 474674 | 239 | 474963 | 240 | 474964 |
|-----|--------|-----|--------|-----|--------|
| 241 | 475341 | 242 | 475342 | 243 | 477547 |
| 244 | 477564 | 245 | 477570 | 246 | 477660 |
| 247 | 477711 | 248 | 477712 | 249 | 477805 |
| 250 | 477955 | 251 | 478044 | 252 | 478107 |
| 253 | 478544 | 254 | 478633 | 255 | 478767 |
| 256 | 478794 | 257 | 478858 | 258 | 478864 |
| 259 | 478908 | 260 | 479042 | 261 | 479215 |
| 262 | 479216 | 263 | 479217 | 264 | 479374 |
| 265 | 479375 | 266 | 479414 | 267 | 479523 |
| 268 | 479524 | 269 | 479667 | 270 | 480059 |
| 271 | 480060 | 272 | 480383 | 273 | 480392 |
| 274 | 480740 | 275 | 481074 | 276 | 482573 |
| 277 | 482574 | 278 | 482857 | 279 | 483054 |
| 280 | 483169 | 281 | 483174 | 282 | 483269 |
| 283 | 483980 | 284 | 484275 | 285 | 484276 |
| 286 | 484858 | 287 | 484865 | 288 | 485282 |
| 289 | 485283 | 290 | 485507 | 291 | 485775 |
| 292 | 486258 | 293 | 486259 | 294 | 486265 |
| 295 | 486266 | 296 | 486297 | 297 | 487155 |
| | | | | | |

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| 298 | 487397 | 299 | 487408 | 300 | 487410 |
|-----|--------|-----|--------|-----|--------|
| 301 | 487411 | 302 | 487428 | 303 | 487506 |
| 304 | 487516 | 305 | 487526 | 306 | 487536 |
| 307 | 487546 | 308 | 487556 | 309 | 487565 |
| 310 | 487649 | 311 | 487851 | 312 | 487895 |
| 313 | 487980 | 314 | 487981 | 315 | 487982 |
| 316 | 487984 | 317 | 488032 | 318 | 488058 |
| 319 | 488378 | 320 | 488383 | 321 | 488436 |
| 322 | 488438 | 323 | 488439 | 324 | 488619 |
| 325 | 488620 | 326 | 498002 | 327 | 511491 |
| 328 | 485773 | 329 | 113329 | | |

21. 37 CFR 1.78(b) provides that when two or more applications filed by the same applicant contain conflicting claims, elimination of such claims from all but one application may be required in the absence of good and sufficient reason for their retention during pendency in more than one application. The *formerly* attached Appendix provides clear evidence that such conflicting claims exist between the 329 related co-pending applications identified above. However, an analysis of all claims in the 329 related co-pending applications would be an extreme burden on the Office requiring millions of claim comparisons.

In order to resolve the conflict between applications, applicant is required to either:

(1) file terminal disclaimers in each of the related 329 applications terminally disclaiming each of the other 329 applications, or;

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(2) provide an affidavit attesting to the fact that all claims in the 329 applications have been reviewed by applicant and that no conflicting claims exists between the applications. Applicant should provide all relevant factual information including the specific steps taken to insure that no conflicting claims exist between the applications, or;

- (3) resolve all conflicts between claims in the above identified 329 applications by identifying how all the claims in the instant application are distinct and separate inventions from all the claims in the above identified 329 applications (note: the five examples in the *formerly* attached **Appendix** are merely illustrative of the overall problem. Only correcting the five identified conflicts would not satisfy the requirement).
- 22. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See <u>In re Goodman</u>, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); <u>In re Longi</u>, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); <u>In re Van Ornum</u>, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); <u>In re Vogel</u>, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, <u>In re Thorington</u>, 418 F.2d 528, 163 USPQ 644 (CCPA 1969). <u>In re Schneller</u>, 397 F.2d 350, 158 U.S.P.Q. 210 (C.C.P.A. 1968).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

23. All pending claims are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over at least one or more of:

U.S. Patent No. 4,694,490 ('490);

U.S. patent no. 4,704,725 ('725);

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U.S. Patent No. 4,965,825 ('825);

U.S. patent no. 5,109,414 ('414),

U.S. patent no. 5,233,654 ('654),

U.S. patent no. 5,335,277 ('277);

in view of at least one or more of:

- -Hazelwood et al (US. Patent No. 4,025,851);(see reasoning and level of skill at '81 as discussed in rejection below and above);
- -The publication "System and Apparatus for Automatic Monitoring Control of Broadcast Circuits" by Yamane et al;(see reasoning and level of skill at '81 as discussed in rejection below and above);
- -Australian Patent document No. 74,619 to Hetrich; (see reasoning and level of skill at '81 as discussed in rejection below and above;
- -"A Public Broadcaster's View of Teletext in the United States", Gunn; (see discussion and reasoning given below);
- -Master Control Techniques" by Marsden vol 9 of the "Journal of the Television Society", '59; (see reasoning and level of skill at '81 as discussed in rejection below and above);
- -"The Automation of Small Television Stations" by Young et al vol 80 of the "Journal of the SMPTE", Oct. '71; (see reasoning and level of skill at '81 as discussed in rejection below and above);

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-U.S. Patent 3,761,888 to Flynn; (see reasoning and level of skill at '81 as discussed in rejection below);

- -U.S. Patent 3,627,914 to Davis; (see reasoning and level of skill at '81 as discussed in rejection below);
- -"Microprocessor For CATV Systems" by Tunmann et al;;(see reasoning and level of skill at '81 as discussed in rejection below);
- -U.K. Patent 959,374 to Germany; (see reasoning and level of skill at '81 as discussed in rejection below);
- -"Automatic Control of Video Tape Equipment at NBC, Burbank", by Byloff,
- '59; (see reasoning and level of skill at '81 as discussed in rejection below);
- -"Video Banks Automate Delayed Satellite Programming", by Chiddix,
- '78; (see rejections below);
- -"The Digitrol 2 ~ Automatic VTR Programme Control", by Skilton, pages 60-61, of -"International Broadcast Engineer", 3/81;(see reasoning and level of skill at '81 as discussed in rejection below);
- -CATV Program Origination and Production, by Schiller et al, '79 (see 892); (this reference merely sets forth, *inter alia*, in one place and in laymen terms, what the level of skill in the art rejection above does in technical terms; so to the extent the above/below rejection is too technical with respect to level of

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skill in the art at '79, the level is described herein in laymen terms for purpose of clarity);

- -Television Production Handbook, by Zettl, Second Edition, '69; (see reasoning and level of skill at '81 as discussed in rejection below);
- -Vikene, WO 80/02093; (Vikene suggests, *inter alia*, a method of transmitting from a broadcaster in addition to the information signal remote control signals, in order to on the receiving side, corresponding to announced programs from the broadcaster which are provided with coded markings, to effect recording of the information on a tape or video recorder. Which markings are also recorded and the recorder is programmable in accordance with the announced programs, so as to be reproduced at a desired time using the recorded markings and the program set in the recorder to sort out the desired information and standard stop the recorder; hence to the extent the above and below discussions do not address the particular determined group members of the group of claims, and to the extent the difference is met with the above Vikene disclosure, it would have been obvious to one having ordinary skill in the art for the convenience gained in the recording of the information on a tape or video recorder);
- -Greenberg U.S. patent 4,547,804; (see rejections above considering the benefit of greater network operator control);

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-Jeffers et al U.S. patent 4,739,510; (see rejections above considering the benefit of the ability to, *inter alia*, decrypt and hence secure programming);

-"Electronic Image and Tone Return Equipment With Switching System and Remote Control Receiver for Television Decoder" by Werner Diederich DT 23 56 969 A1; (Diederich suggests, *inter alia*, an electronic image and tone return equipment with switching system and remote control receiver for television decoder. hence to the extent the above and below discussions do not address the particular determined group members of the group of claims, and to the extent the difference is met with the above Diederich disclosure, it would have been obvious to one having ordinary skill in the art for the convenience gained);

- -Campbell et al WO81/02961; to the extent that the above and below do not address this group of claims and to the extent that Campbell et al do (see above), it would have been obvious for the benefits described above including, *inter alia*, enhanced subscriber station services);
- -Campbell et al Aban. Parent Appl. No. 135,987; (same as WO81/02961);
- -Campbell et al U.S. patent 4,536,791('791); (same as WO81/02961);
- -"Automatic Storage and Retrieval of Videotaped Programs", by Kazama et al, 4/79; (Kazama et al suggests, *inter alia*, a fully automatic storage receive of Videotaped Programs that is computer controlled, so as to constitute tape-

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traffic and handling system. hence to the extent the above and below discussions do not address the particular determined group members of the group of claims, and to the extent the difference is met with the above Kazama et al disclosure, it would have been obvious to one having ordinary skill in the art for the convenience gained);

-"Code accompanying TV program turns on video cassette recorder in proposed scheme", by J Gosch, vol 54 no. 3, February 10, 1981; (Gosch teach, inter alia, code accompanying TV programming for turning on a video cassette recorder for delayed or altered schedule programming; as well as for unscheduled broadcasts and for alerting emergencies and providing updates. Hence, to the extent the above and below discussions do not address the particular determined group members of the group of claims, and to the extent the difference is met with the above Gosch disclosure, it would have been obvious to one having ordinary skill in the art for the convenience gained); -"An Automated Programming Control System For Cable TV", by Stern (80); (Stern suggests, inter alia, an automated programming control system for Cable TV having a machine control interface unit containing special circuits for sensing control track pulses, so the system can accurately search for different program material and commercials recorded on one tape; also there is suggested pre-roll of a tape to a specific program; and rewind to a previous

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segment...so as to "essentially" be "random-access" to the contents of the video tape, under full system control. Hence to the extent the above and below discussions do not address the particular determined group members of the group of claims, and to the extent the difference is met with the above Stern disclosure, it would have been obvious to one having ordinary skill in the art for the convenience);

- -"Television Line 21 Encoded Information and It's Impact on Receiver Design", Breeze, Nov. '72; (see rejection above. Hence, to the extent that the above and below discussions do not suggest the particular determined group members of the group of claims, and to the extent that it is met by Breeze (see above) it would have been obvious for the convenience gained);
- -"Automatic Switching in the CBC An Update" by M.W.S. Barlow (Sept. 76); (suggests, *inter alia*, *network controlled* automatic switching process.

 Hence, to the extent that the above and below discussions do not suggest the particular determined group members of the group of claims, and to the extent that it is met by the Barlow disclosure, it would have been obvious for the convenience gained);
- -"Transmission no Alphanumeric Data by Television", by Millar et al 1 370 535, GB-1974-10; (see discussion and reasoning below);

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-Galumbeck et al (U.S. patent no. 4,725,886); (to the extent that the above and below discussion does not suggest the particular determined group members of the group of claims, and to the extent that the difference is met by Galumbeck et al, it would have been obvious for the convenience gained); -CBS/CCETT North American Broadcast Teletext Specification, 5/81; (suggests, *inter alia*, captioning transmitted to a decoder for superimposing over the program video at a pre-designated time, and selecting a classification of captions so as to be displayed over program video. Hence, to the extent that the above and below do not suggest the particular group of claims and to the extent it is met by the CBS/CCETT disclosure, it would have been obvious for the convenience gained);

- -Zaboklicki (DE 2,904,891); (to the extent that the discussion above and bellow does not suggest the particular determined group members of the group of claims, and to the extent it is met bo Zabolicki, it would have been obvious for the benefit of the convenience gained);
- -Nagel (U.S. patent no. 4,064,490); (suggests, *inter alia*, methods and apparatus for the reception, and processing of computer applications. Hence to the extent the above and below discussions do not address the particular determined group members of the group of claims, and to the extent the

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difference is met with the above Zaboklicki disclosure, it would have been obvious for the benefit of the convenience gained);

-Kakihara et al (U.S. patent no. 4,251,691); (suggests, *inter alia*, a center-toend type information service system utilizing the public telephone networks
that are fundamental communication media of nation-wide scale in which
desired information is requested from the terminal side to the center by means
of a telephone set of keyboard and then delivered to and received by a TV
receiver, wherein a part of the center functions is transferred together with the
exchange function to a subscriber located near the terminal so that the
length transmission path connecting the center to terminals becomes shorter
and the cost of the whole system can be reduced. Hence, to the extent the
above and below discussions do not address the particular determined group
members of the group of claims, and to the extent the difference is met with
the above Kakihara disclosure, it would have been obvious to one having
ordinary skill in the art for the convenience gained);

-Hedger et al (Telesoftware-Value Added Teletext); (suggests, *inter alia*, broadcast software and subscriber station computing apparatus having input and output device for interactive user applications. Hence, to the extent the above and below discussions do not address the particular determined group members of the group of claims, and to the extent the difference is met with

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the above Kakihara disclosure, it would have been obvious to one having ordinary skill in the art for the convenience gained);

-"The Vertical Interval: A General-Purpose Transmission Path", Ted V. Anderson; (See discussion and reasoning below);

"A Public Broadcaster's View of Teletext in the United States", Gunn; (see discussion and reasoning given below);

-"Automatic Program Recording System, Gaucher, '75; (suggests, *inter alia*, an automatic program recording system. Hence, to the extent the above and below discussions do not address the particular determined group members of the group of claims, and to the extent the difference is met with the above Gaucher disclosure, it would have been obvious to one having ordinary skill in the art for the convenience gained);

-U.S. patent 4,290,142, to Schnee et al (to the extent that the above and below discussion does not suggests the particular determined group members of the group of claims, and to the extent that Schnee et al do, it would have been obvious for the benefit of the convenience gained).

See Appendix A.

It is apparent that no pending claim is more than an obvious variation of the patented claims when the teachings discussed throughout this action are considered. Examiner submits Appendix A for illustrative purposes. Assuming arguendo, that

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applicants patents, alone, do not cover the pending claims, they are clearly not independent and distinct when the body of prior art described in this action, *inter alia*, is considered. Here, the differences, to the extent they are supported by '81 or are at least obvious over what '81, *in fact*, supports, i.e. what applicants, in fact, possessed as well as the affiliated cable head end control they are, for the benefits described above, suggested by the prior art (note: Appendix A is merely illustrative of the overall problem).

Specification

24. It is recognized that applicants have been filing amendments to the co-pending instant disclosure page's 37, even though it is now more than 18 years after the priority benefit claimed under Section 120. Applicants have identified the '87 disclosed page 14 line 32 through page 15 line 6 as their sole basis of support for this *very late* modification. However, the sole *basis* offered, is rejected. The added material which was not necessarily fully supported by at least one of the intersection of the '87 and '81 disclosures, and the original '87 disclosure is the:

substitution of --units-- for "words" ('87, page 37, line 24); and substitution of --words-- for "units" ('87, page 37 line 25).

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Oath/Declaration

25. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because:

It does not state that the person making the oath or declaration in a continuation-in-part application filed under the conditions specified in 35 U.S.C. 120 which discloses and claims subject matter in addition to that disclosed in the prior copending application, acknowledges the duty to disclose to the Office all information known to the person to be material to patentability as defined in 37 CFR 1.56 which occurred between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part application.

Examiner makes the finding of fact for written description, that applicants have filed yet another continuation-in-part when they filed the instant disclosure under 35 U.S.C. 120, and as a consequence they need to file a new oath or declaration. The circumstance may be unintended or may be intended, *but it is a fact*, and is nevertheless, understood to be the law. For ex,

See In re Lund, 376 F.2d 982, 153 U.S.P.Q. 624 (C.C.P.A. 1967), In Lund, the C.C.P.A. stated:

As the expression itself implies, the purpose of "incorporation by reference" is to make one document become a part of another document by referring to the former in the latter in such a manner that it is apparent that the cited document is part of the referencing document as if it were fully set out therein... (emphasis added).

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Lund, 376 F.2d at 1370-71.

It is understood that judge made *law* holds that when applicants supplemented their disclosure on the date of filing their instant continuation under Section 120 by *inserting into page 1* of the instant continuation one of the other co-pending applications of the same chain of co-pending applications and specifically 'incorporating-by-reference' co-pending application 08/113,329('329), "in it's entirety" into the instant disclosure, applicants have **in fact** *conveyed* the instant disclosure as including the entire content of co-pending application 08/113,329. This incorporation "in it[']s entirety" would necessarily include, *inter alia*, each piece of prior art cited therein.

It appears there is corroboration in the record that it was applicants' intent to accomplish inserting paper no 21, of '329, into instant page 1 through the use of incorporation-by-reference "in it[']s entirety". Since such an incorporation-by-reference "in it[']s entirely" serves to bring paper no. 21, then such an incorporation-by-reference necessarily brings in *all* of the contents of the identified application through the use of the term "in it[']s entirety".

For example, it is recognized that even though applicants' representative's intention, *under Section 120*, may have merely been to include at least the paper no. 21 of that document, he, *under Section 120 in fact*, chose to insert the "entirety" of the '329 contents into page 1. That is, even though applicants' representative could

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have included paper 21 into a PTO Form 1449, or merely 'incorporated it by reference' *into an response*, he did not.

Conclusion

With regard to future interviews, M.P.E.P. 713.03 is hereby called to applicants attention.

- 26. Any inquiry concerning this communication or earlier communications from the examiner should be directed to *William Luther* whose telephone number is (703) 308-6609. The examiner can normally be reached on Monday through Friday from 9:30 am to 3:00 pm.
- 27. If attempts to reach the examiner by telephone are unsuccessful, supervisor Andrew Faile can be reached at (703) 305-4380.
- 28. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3900.

William Luther Primary Examiner March 24, 2000

PENDING

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FINDING

6. A method of generating and delivering an individualized mass medium program presentation at a receiver station, said receiver station having a receiver for receiving a mass medium program signal, a computer for generating and communicating information, and one or more output devices operatively connected to said receiver and said computer for delivering to a viewer a mass medium program and computer information, with said computer comprising one or more data storage locations, said method comprising the steps of: storing a timing signal and viewer interest identification data specifying a plurality of different viewer interests; controlling said computer a first time based on a comparison of said timing signal or said viewer interest identification data to other data, said first step of controlling comprising: (1) inputting into said computer further data designating a viewer interest of said plurality of different viewer interests or a time; (2) selecting a plurality of

490 1. A method of communicating television program material to a multiplicity of receiver stations each of which includes a television receiver and computer, the computers being adapted to generate and transmit overlay signals to their associated television receivers, said overlay signals causing the display of user specific information related to said program material, and with at least some of said computers being programmed to process overlay modification control signals so as to modify the overlay signals transmitted to their associated receivers, each of said computers being programmed to accommodate a specific user application, comprising the steps of: transmitting a video signal containing a television program signal to said receivers, transmitting an instruct-tooverlay signal to said receiver stations at a time when the corresponding overlay is not being

for example
-'654;
-'725 + Campbell e al;
-'725 + Jeffers et al;
-'490 + Campbell et al;
-'725 + Jeffers et al.
-'825 + Campbell et al;
-'825 + Jeffers et al.
-'277 + Campbell et al;
-'277 + Jeffers et al

For '654 see clms 1-71;

For '725 patent see claims 1-5;

For '490 patent see clms 1-13.
For Campbell et al see abnd parent of '791 patent corresponding to '791 col 17 line 65 through col 18 line 29.

For Jeffers et al see '510 patent col 14 lines 58-64.

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signals, each selected signal including data, mass medium program information content, or a control signal respecting said viewer interest; and (3) storing each selected signal at a storage location; controlling said computer a second time based on said comparison, said second step of controlling comprising: (1) selecting one or more computer programming instructions; (2) generating mass medium program information content in respect to a second viewer interest of said plurality of different viewer interests; and (3) preparing to communicate said generated mass medium program information content upon instruction; controlling said computer a third time based on said timing signal or said comparison, said third step of controlling comprising: (1) selecting a portion of said mass medium program information content; (2) selecting a location; and (3) communicating said selected mass medium program information content to said selected location; and presenting to a subscriber at a controlled time said mass

displayed, receiving said video signal at a plurality of receiver stations and displaying said program material on the video receivers of selected ones of said plurality of receiver stations, detecting the presence of said instruct-to-overlay signal at said selected receiver stations and coupling said instruct-tooverlay signal to the computers associated with the video receivers of said selected stations, and causing said last named computers to generate and transmit their overlay signals to their associated television receivers in response to said instruct-to-overlay signal, thereby to present a display at the selected receiver stations including the television program material and the related computer generated overlay, the overlays displayed at a multiplicity of said receiver stations being different, with each display specific to a specific user.

| PENDING | PATENT | FINDING |
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| medium program with said generated mass medium program information content, with said mass medium program and said generated mass medium program information content being outputted to said subscriber either as a combined or sequential presentation at an output device or as parallel presentations at a plurality of output devices. | | |

PENDING

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7. A method of generating and delivering an individualized mass medium program presentation at a receiver station, said receiver station having a receiver for receiving a mass medium program signal, a computer for generating and communicating information, and one or more output devices operatively connected to said receiver and said computer for delivering to a viewer a mass medium program and computer information, with said computer comprising one or more data storage locations, said method comprising the steps of: storing a timing signal and a plurality of identification signals specifying different viewer interests; controlling said computer a plurality of times, each time based on a comparison of said timing signal or identification signals to other data, said first step of controlling comprising each time: (1) inputting further data designating a viewer interest of said different viewer interests or a time; (2) selecting a signal, each selected signal including

'490 1. A method of communicating television program material to a multiplicity of receiver stations each of which includes a television receiver and computer, the computers being adapted to generate and transmit overlay signals to their associated television receivers, said overlay signals causing the display of user specific information related to said program material, and with at least some of said computers being programmed to process overlay modification control signals so as to modify the overlay signals transmitted to their associated receivers, each of said computers being programmed to accommodate a specific user application, comprising the steps of: transmitting a video signal containing a television program signal to said receivers, transmitting an instruct-tooverlay signal to said receiver stations at a time when the corresponding overlay is not being

for example
-'654;
-'725 + Campbell e al;
-'725 + Jeffers et al;
-'490 + Campbell et
al;
-'725 + Jeffers et al.
-'825 + Campbell et
al;
-'825 + Jeffers et al.
-'277 + Campbell et
al;
-'277 + Jeffers et al.

For '654 see clms 1-71;

For '725 patent see claims 1-5;

For '490 patent see clms 1-13.
For Campbell et al see abnd parent of '791 patent corresponding to '791 col 17 line 65 through col 18 line 29.

For Jeffers et al see '510 patent col 14 lines 58-64.

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data, information content, or a control signal respecting a mass medium program; and (3) storing each selected signal at a storage location, some of said selected stored signals designating said different viewer interests; controlling said computer based on said comparison, said second step of controlling comprising: (1) selecting one or more computer programming instructions; (2) generating mass medium program information content with respect to a second viewer interest; and (3) preparing to communicate said generated mass medium program information content upon instruction; controlling said computer based on said timing signal or said comparison, said third step of controlling comprising: (1) selecting a portion of said mass medium program information content; (2) selecting a location; and (3) communicating said selected mass medium program information content to said selected location; and presenting to a subscriber at a controlled time said mass medium program with said

displayed, receiving said video signal at a plurality of receiver stations and displaying said program material on the video receivers of selected ones of said plurality of receiver stations, detecting the presence of said instruct-to-overlay signal at said selected receiver stations and coupling said instruct-tooverlay signal to the computers associated with the video receivers of said selected stations, and causing said last named computers to generate and transmit their overlay signals to their associated television receivers in response to said instruct-to-overlay signal, thereby to present a display at the selected receiver stations including the television program material and the related computer generated overlay, the overlays displayed at a multiplicity of said receiver stations being different, with each display specific to a specific user.

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|---|--------|---------|
| generated mass medium program information content, with said mass medium program and said generated mass medium program information content being outputted to said subscriber either as a combined or sequential presentation at an output device or as parallel presentations at a plurality of output devices. | | |

PENDING

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8. A method of generating and delivering an individualized mass medium program presentation at a receiver station, said receiver station having a receiver for receiving a mass medium program signal, a computer for generating and communicating information, and one or more output devices operatively connected to said receiver and said computer for delivering to a viewer a mass medium program and computer information, with said computer comprising one or more data storage locations, said method comprising the steps of storing a timing signal and identification data, each identification datum specifying a plurality of different viewer interests; controlling said computer a first time based on a comparison of said timing signal or identification data to other data, said first step of controlling comprising: (1) inputting to said computer data designating a viewer interest of said plurality of different viewer interests or a time; (2) selecting a first signal, each selected first

'725 1. A method of communicating data to a multiplicity of receiver stations, each of which includes a computer adapted to generate and transmit user specific signals to one or more associated output devices, with at least some of said computers being programmed to process modification control signals so as to modify the user specific signals transmitted to their associated output devices, each of said computers being programmed to accommodate a special user application, comprising the steps of: transmitting an instruct-to-process signal to said computers to cause each of said computers to process data in accordance with its associated special user application, transmitting an instruct-to-output signal to said computers at a time when the corresponding user specific information is not being transmitted to an output device, detecting the presence of said instruct-tofor example

-'654;

-'725 + Campbell e al;

-'725 + Jeffers et al;

-'490 + Campbell et al;

-'725 + Jeffers et al.

-'825 + Campbell et al:

-'825 + Jeffers et al.

-'277 + Campbell et al:

-'277 + Jeffers et al

For '654 see clms 1-71:

For '725 patent see claims 1-5;

For '490 patent see clms 1-13. For Campbell et al see abnd parent of '791 patent corresponding to '791 col 17 line 65 through col 18 line 29.

For Jeffers et al see '510 patent col 14 lines 58-64.

PENDING

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signal including data, information content, or a control signal respecting a mass medium program presentation; and (3) storing each selected first signal at a storage location; controlling said computer a second time based on said comparison, said second step of controlling comprising: (1) inputting data designating a second viewer interest of said plurality of different viewer interests or a time; (2) selecting a second signal, each selected second signal including information content or a control signal respecting a mass medium program presentation; and (3) communicating said computer a third time based on said comparison, said third step of controlling comprising: (1) inputting data designating a third viewer interest or a time; (2) selecting a third signal, each selected third signal including mass medium program information content and a control signal; and (3) communicating each selected third signal to a processor and an output device; presenting to a subscriber said mass medium program

output signal at selected receiver stations and coupling said instruct-to-output signal to the computers associated with said selected stations, and causing said last named computers simultaneously to output their user specific signals to their associated output devices in response to said instruct-to-output signal, thereby to transmit to the selected output devices an output signal comprising said data and said related user specific signals, the output signals at a multiplicity of said output devices being different, with each output signal specific to a specific user.

| PENDING | PATENT | FINDING |
|---|--------|---------|
| with said mass medium program information content, with said mass medium program and said mass medium program information content being outputted to said subscriber either as a combined or sequential presentation at an output device or as parallel presentations at a plurality of output devices. | PATENT | FINDING |

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9. A method of generating and delivering an individualized mass medium program presentation at a receiver station, said receiver station having a receiver for receiving a mass medium program signal, a computer for generating and communicating information, and one or more output devices operatively connected to said receiver and said computer for delivering to a viewer a mass medium program and computer information, with said computer comprising one or more data storage locations, said method comprising the steps of: storing a timing signal and signal identification data designating a specific signal type; controlling said computer a first time based on a comparison of said timing signal or said signal identification data or other data, said first step of controlling comprising: (1) selecting a first signal, each selected first signal including data, information content, or a control signal respecting a mass medium program presentation; and (2) storing each selected first signal at a

'725 1. A method of communicating data to a multiplicity of receiver stations, each of which includes a computer adapted to generate and transmit user specific signals to one or more associated output devices. with at least some of said computers being programmed to process modification control signals so as to modify the user specific signals transmitted to their associated output devices, each of said computers being programmed to accommodate a special user application, comprising the steps of: transmitting an instruct-to-process signal to said computers to cause each of said computers to process data in accordance with its associated special user application, transmitting an instruct-to-output signal to said computers at a time when the corresponding user specific information is not being transmitted to an output device, detecting the presence of said instruct-tofor example -'654;

-'725 + Campbell e al;

-'725 + Jeffers et al;

-'490 + Campbell et al;

- '725 + Jeffers et al.

-'825 + Campbell et al:

-'825 + Jeffers et al.

-'277 + Campbell et al:

-'277 + Jeffers et al

For '654 see clms 1-71;

For '725 patent see claims 1-5;

For '490 patent see clms 1-13.
For Campbell et al see abnd parent of '791 patent corresponding to '791 col 17 line 65 through col 18 line 29.

For Jeffers et al see '510 patent col 14 lines 58-64.

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storage location; controlling said computer a second time based on said comparison, said second step of controlling comprising: (1) selecting a second signal, each selected second signal including information content or a control signal respecting a mass medium program presentation; and (2) communicating each selected second signal to a processor or an output device; controlling said computer a third time based on said comparison, said third step of controlling comprising: (1) identifying a third signal, each identified third signal being a control signal designating a signal type; and (2) communicating each identified third signal to a processor and an output device; controlling said computer a fourth time based on said comparison, said fourth step of controlling comprising: (1) selecting a first signal or said timing signal; and (2) generating or communicating some mass medium program information content in response to a control signal; and presenting to a subscriber a mass medium program with

output signal at selected receiver stations and coupling said instruct-to-output signal to the computers associated with said selected stations, causing said last named computers simultaneously to output their user specific signals to their associated output devices in response to said instruct-to-output signal, thereby to transmit to the selected output devices an output signal comprising said data and said related user specific signals, the output signals at a multiplicity of said output devices being different, with each output signal specific to a specific user.

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| said mass medium program information content, with said mass medium program and said mass medium program content information content being outputted to said subscriber either as a combined or sequential presentation at an output device or as parallel presentations at a plurality of output devices. | | |

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10. A method of generating and delivering an individualized mass medium program presentation at a receiver station, said receiver station having a receiver for receiving a mass medium program signal, a computer for generating and communicating information, and one or more output devices operatively connected to said receiver and said computer for delivering to a viewer a mass medium program and computer information, with said computer comprising one or more data storage locations, said method comprising the steps of: storing a timing signal and a plurality of a first data, each first datum designating a different type of signal; controlling said computer one or more times based on a comparison, said first step of controlling comprising: (1) selecting a first signal, each selected first signal including data, information content, or a control signal respecting a mass medium program presentation; and (2) storing each selected first signal at a storage location; controlling said computer based on said

'725 1. A method of communicating data to a multiplicity of receiver stations, each of which includes a computer adapted to generate and transmit user specific signals to one or more associated output devices, with at least some of said computers being programmed to process modification control signals so as to modify the user specific signals transmitted to their associated output devices, each of said computers being programmed to accommodate a special user application, comprising the steps of: transmitting an instruct-to-process signal to said computers to cause each of said computers to process data in accordance with its associated special user application, transmitting an instruct-to-output signal to said computers at a time when the corresponding user specific information is not being transmitted to an output device, detecting the presence of said instruct-tofor example
-'654;
-'725 + Campbell e al;
-'725 + Jeffers et al;
-'490 + Campbell et
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-'725 + Jeffers et al.
-'825 + Campbell et
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-'825 + Jeffers et al.
-'277 + Campbell et
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-'277 + Jeffers et al
For '654 see clms 171;

For '725 patent see claims 1-5;

For '490 patent see clms 1-13.
For Campbell et al see abnd parent of '791 patent corresponding to '791 col 17 line 65 through col 18 line 29.

For Jeffers et al see '510 patent col 14 lines 58-64.

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comparison, said second step of controlling comprising: (1) selecting a second signal, each selected second signal including information content or a control signal respecting a mass medium program presentation; and (2) communicating each selected second signal to a processor or an output device; controlling said computer based on said comparison, said third step of controlling comprising: (1) identifying a third signal, each identified third signal being a control signal designating a signal type; and (2) communicating each identified third signal to a processor or an output device; controlling said computer based on said comparison, said fourth step of controlling comprising: (1) selecting a first signal or a timing signal; and (2) generating or communicating some mass medium program information content in response to a control signal; and presenting to a subscriber a mass medium program with said mass medium program information content, with said mass medium program and said

output signal at selected receiver stations and coupling said instruct-to-output signal to the computers associated with said selected stations, causing said last named computers simultaneously to output their user specific signals to their associated output devices in response to said instruct-to-output signal, thereby to transmit to the selected output devices an output signal comprising said data and said related user specific signals, the output signals at a multiplicity of said output devices being different, with each output signal specific to a specific user.

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| mass medium program information content being outputted to said subscriber either as a combined or sequential presentation at an output device or as parallel presentations at a plurality of output devices. | | |

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11. A method of providing data of interest to a receiver station from a remote data source, said data of interest for use at the receiver station in generating or outputting a receiver specific datum, said method comprising the steps of: storing data at said remote data source: receiving at said remote data source a query from said receiver station; transmitting said data from said remote data source to said receiver station in response to said step of receiving said query, said receiver station selecting and storing some of said transmitted data; transmitting from a second remote source to said receiver station a signal which controls said receiver station to select and process an instruct signal which is effective at said receiver station to coordinate presentation of said data with a separate predetermined presentation sequence.

'725 1. A method of communicating data to a multiplicity of receiver stations, each of which includes a computer adapted to generate and transmit user specific signals to one or more associated output devices. with at least some of said computers being programmed to process modification control signals so as to modify the user specific signals transmitted to their associated output devices, each of said computers being programmed to accommodate a special user application, comprising the steps of: transmitting an instruct-to-process signal to said computers to cause each of said computers to process data in accordance with its associated special user application, transmitting an instruct-to-output signal to said computers at a time when the corresponding user specific information is not being transmitted to an output device, detecting the presence of said instruct-to-

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-'725 + Campbell e al;
-'725 + Jeffers et al;
-'490 + Campbell et
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-'725 + Jeffers et al.
-'825 + Campbell et
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-'825 + Jeffers et al.
-'277 + Campbell et
al;
-'277 + Jeffers et al

For '654 see clms 1-71;

For '725 patent see claims 1-5;

For '490 patent see clms 1-13.
For Campbell et al see abnd parent of '791 patent corresponding to '791 col 17 line 65 through col 18 line 29.

| output signal at selected receiver stations and coupling said instruct-to-output signal to the computers associated with said selected stations, | PENDING | PATENT | FINDING |
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| and causing said last named computers simultaneously to output their user specific signals to their associated output devices in response to said instruct-to-output signal, thereby to transmit to the selected output devices an output signal comprising said data and said related user specific signals, the output signals at a multiplicity of said output devices being different, with each output signal specific to a specific user. | | receiver stations and coupling said instruct-to-output signal to the computers associated with said selected stations, and causing said last named computers simultaneously to output their user specific signals to their associated output devices in response to said instruct-to-output signal, thereby to transmit to the selected output devices an output signal comprising said data and said related user specific signals, the output signals at a multiplicity of said output devices being different, with each output signal | |

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12. A method of communicating subscriber station information from a subscriber station to one or more remote data collection stations, said method comprising the steps of: inputting a viewer's or participant's reaction at a subscriber station; receiving at said subscriber station information that designates an instruct signal to process or an output to deliver in consequence of subscriber input; determining the presence of said subscriber input at said subscriber station by processing said viewer's or participant's reaction; processing an instruct signal which is effective to coordinate presentation of data with a separate predetermined presentation sequence at said subscriber station in consequence of said step of determining; and transferring from said subscriber station to one or more remote data collection stations an indication confirming delivery of said instruct signal based on said step of processing or confirming delivery.

'725 1. A method of communicating data to a multiplicity of receiver stations, each of which includes a computer adapted to generate and transmit user specific signals to one or more associated output devices, with at least some of said computers being programmed to process modification control signals so as to modify the user specific signals transmitted to their associated output devices, each of said computers being programmed to accommodate a special user application, comprising the steps of: transmitting an instruct-to-process signal to said computers to cause each of said computers to process data in accordance with its associated special user application, transmitting an instruct-to-output signal to said computers at a time when the corresponding user specific information is not being transmitted to an output device, detecting the presence of said instruct-tofor example
-'654;
-'725 + Campbell e al;
-'725 + Jeffers et al;
-'490 + Campbell et al;
-'725 + Jeffers et al.
-'825 + Campbell et al:

al;
-'825 + Jeffers et al.
-'277 + Campbell et

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-'277 + Jeffers et al

For '654 see clms 1-71;

For '725 patent see claims 1-5;

For '490 patent see clms 1-13.
For Campbell et al see abnd parent of '791 patent corresponding to '791 col 17 line 65 through col 18 line 29.

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| | output signal at selected receiver stations and coupling said instruct-to-output signal to the computers associated with said selected stations, and causing said last named computers simultaneously to output their user specific signals to their associated output devices in response to said instruct-to-output signal, thereby to transmit to the selected output devices an output signal comprising said data and said related user specific signals, the output signals at a multiplicity of said output devices being different, with each output signal specific to a specific user. | |

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16. A method of controlling a remote intermediate transmitter station to communicate data to one or more receiver stations, with said remote intermediate transmitter station including a broadcast or cablecast transmitter, a plurality of selective transfer devices each operatively connected to said broadcast or cablecast transmitter, a data receiver, a control signal detector, and a controller or computer capable of controlling one or more of said selective transfer devices, said remote intermediate transmitter station adapted to detect one or more control signals, to control the communication of said data, and to deliver said data to said broadcast or cablecast transmitter, said method comprising the steps of- (1) receiving said data to be transmitted by the remote intermediate transmitter station and delivering said data to a data transmitter, said data comprising an instruct signal which is effective at the receiver station to coordinate presentation of said data with a separate predetermined presentation sequence; (2)

14. A method of processing signals including: (a) the step of receiving a carrier transmission; (b) the step of demodulating said carrier transmission to detect an information transmission thereon; (c) the step of detecting and identifying embedded signals on said information transmission; (d) the step of passing said embedded signals to a device or devices to be controlled based on instructions identified within said embedded signals; (e) the step of controlling said devices based on the instructions within said embedded signals; and (f) the step of recording the receipt of and passing to said devices of said embedded signals

for example

- -'654;
- -'725 + Campbell e al;
- -'725 + Jeffers et al;
- -'490 + Campbell et al;
- -'725 + Jeffers et al.
- -'825 + Campbell et al;
- -'825 + Jeffers et al.
- -'277 + Campbell et al:
- -'277 + Jeffers et al

For '654 see clms 1-71;

For '725 patent see claims 1-5;

For '490 patent see clms 1-13.
For Campbell et al see abnd parent of '791 patent corresponding to '791 col 17 line 65 through col 18 line 29.

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| receiving said one or more control signals which at the remote intermediate transmitter station operate to control the communication of said data; and (3) transmitting said one or more control signals from said data transmitter before a specific time. | | |

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19. A method of controlling a receiver station including the steps of. detecting the presence or absence of a broadcast or cablecast control signal; inputting an instruct-to-react signal to a processor based on said step of detecting; controlling said processor to output specific information in response to said step of inputting; and coordinating presentation of data with a separate predetermined presentation sequence based on information received from said processor based on said step of controlling.

<u>'825</u> 14. A method of processing signals including: (a) the step of receiving a carrier transmission; (b) the step of demodulating said carrier transmission to detect an information transmission thereon; (c) the step of detecting and identifying embedded signals on said information transmission; (d) the step of passing said embedded signals to a device or devices to be controlled based on instructions identified within said embedded signals; (e) the step of controlling said devices based on the instructions within said embedded signals; and (f) the step of recording the receipt of and passing to said devices of said embedded signals

for example - 654; -'725 + Campbell e al; -'725 + Jeffers et al; -'490 + Campbell et al; - '725 + Jeffers et al. -'825 + Campbell et al; -'825 + Jeffers et al. -'277 + Campbell et al: -'277 + Jeffers et al For '654 see clms 1-71; For '725 patent see claims 1-5;

> For '490 patent see clms 1-13. For Campbell et al see abnd parent of '791 patent corresponding to '791 col 17 line 65 through col 18 line 29.

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23. A method of controlling a receiver station, said receiver station having a processor for passing and executing instructions and a clock operatively connected to said processor for inputting a timing signal, said method comprising the steps of: receiving a broadcast or cablecast transmission; demodulating said broadcast or cablecast transmission to detect an information transmission therein, said information transmission comprising an instruct signal which is effective to coordinate presentation of said with a separate predetermined presentation sequence; detecting said instruct signal in said information transmission and passing said instruct signal to said processor; delaying, under processor control, passing said instruct signal to a controllable apparatus; passing said instruct signal to said controllable apparatus based on a timing signal; and

'825 14. A method of processing signals including: (a) the step of receiving a carrier transmission; (b) the step of demodulating said carrier transmission to detect an information transmission thereon; (c) the step of detecting and identifying embedded signals on said information transmission; (d) the step of passing said embedded signals to a device or devices to be controlled based on instructions identified within said embedded signals; (e) the step of controlling said devices based on the instructions within said embedded signals; and (f) the step of recording the receipt of and passing to said devices of said embedded signals

for example

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- -'725 + Jeffers et al;
- -'490 + Campbell et al:
- -'725 + Jeffers et al.
- -'825 + Campbell et al:
- -'825 + Jeffers et al.
- -'277 + Campbell et al:
- -'277 + Jeffers et al

For '654 see clms 1-71:

For '725 patent see claims 1-5;

For '490 patent see clms 1-13.
For Campbell et al see abnd parent of '791 patent corresponding to '791 col 17 line 65 through col 18 line 29.

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25. A method of communicating data and update material to one or more mass medium programming receiver stations each of which includes a broadcast or cablecast data receiver, a data storage device, a control signal detector, a computer capable of processing data, said receiver stations adapted to detect and respond to one or more instruct signals and to store data for subsequent processing, said method comprising the steps of. (1) receiving said data to be transmitted and delivering the data to a transmitter; (2) receiving said one or more instruct signals which at the receiver station are effective to coordinate presentation of said data with a separate predetermined presentation sequence; (3) transferring said one or more instruct signals to a transmitter; and (4) transmitting an information transmission comprising said data and said one or more instruct signals.

'725 1. A method of communicating data to a multiplicity of receiver stations, each of which includes a computer adapted to generate and transmit user specific signals to one or more associated output devices, with at least some of said computers being programmed to process modification control signals so as to modify the user specific signals transmitted to their associated output devices, each of said computers being programmed to accommodate a special user application, comprising the steps of: transmitting an instruct-to-process signal to said computers to cause each of said computers to process data in accordance with its associated special user application, transmitting an instruct-to-output signal to said computers at a time when the corresponding user specific information is not being transmitted to an output device, detecting the presence of said instruct-tofor example

- -'654;
- -'725 + Campbell e al;
- -'725 + Jeffers et al;
- -'490 + Campbell et al;
- -'725 + Jeffers et al.
- -'825 + Campbell et al:
- -'825 + Jeffers et al.
- -'277 + Campbell et al;
- -'277 + Jeffers et al

For '654 see clms 1-71;

For '725 patent see claims 1-5;

For '490 patent see clms 1-13.
For Campbell et al see abnd parent of '791 patent corresponding to '791 col 17 line 65 through col 18 line 29.

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| | output signal at selected receiver stations and coupling said instruct-to-output signal to the computers associated with said selected stations, and causing said last named computers simultaneously to output their user specific signals to their associated output devices in response to said instruct-to-output signal, thereby to transmit to the selected output devices an output signal comprising said data and said related user specific signals, the output signals at a multiplicity of said output devices being different, with each output signal specific to a specific user. | |

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30. A method of generating and delivering an individualized mass medium program presentation comprising mass medium program content and receiver station program information content at a receiver station, said receiver station having a receiver for receiving a mass medium program signal, a computer for generating and communicating information, and one or more output devices operatively connected to said receiver and said computer for delivering to a viewer said presentation, with said computer comprising one or more data storage locations, said method comprising the steps of: storing a timing signal specifying a time or a series of times; controlling said computer a first time based on said timing signal, said first step of controlling comprising: (1) making a comparison between stored identification data designating a viewer interest and received data including timing data; (2) selecting a portion of said received data based on said comparison: and (3) storing said selected portion at a one of said one

490 1. A method of communicating television program material to a multiplicity of receiver stations each of which includes a television receiver and computer, the computers being adapted to generate and transmit overlay signals to their associated television receivers, said overlay signals causing the display of user specific information related to said program material, and with at least some of said computers being programmed to process overlay modification control signals so as to modify the overlay signals transmitted to their associated receivers, each of said computers being programmed to accommodate a specific user application, comprising the steps of: transmitting a video signal containing a television program signal to said receivers, transmitting an instruct-tooverlay signal to said receiver stations at a time when the corresponding overlay is not being

for example
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-'277 + Campbell et
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-'277 + Campbell et

For '654 see clms 1-71;

For '725 patent see claims 1-5;

For '490 patent see clms 1-13.
For Campbell et al see abnd parent of '791 patent corresponding to '791 col 17 line 65 through col 18 line 29.

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or more storage locations; controlling said computer a second time based on said timing signal, said second step of controlling comprising: (1) selecting one or more computer programming instructions; (2) generating or retrieving receiver station program information content based on said selected portion of data and in accordance with said instructions; and (3) preparing to communicate said receiver station program information content; controlling said computer a third time based on said timing signal; said third step of controlling comprising: (1) selecting some of at least one of said mass medium program content and said receiver station program information content; (2) selecting one or more output devices; (3) communicating said selected content to said selected one or more output devices; thereby presenting to a subscriber at a controlled time an individualized mass medium program with mass medium program content and receiver station program information content, said mass medium program

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| content and said receiver station program information content being outputted to said subscriber either as a combined or sequential presentation at an output device or as parallel presentations at a plurality of output devices. | | |

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31. An apparatus for coordinating a programming presentation at a mass medium program receiver station comprising: a first output device for outputting to a subscriber at least some of a mass medium program; a storage device for storing a timing control signal, said timing control signal comprising a datum designating a time (a) to obtain from a remote station some information to be processed for subsequent output in coordination with said mass medium program or (b) to select some information associated with a coordinated programming presentation when received from a remote station; a processor operatively connected to said storage device for receiving from said remote station one or more codes or identification data that designate one or more outputs to coordinate with said mass medium program; a receiver operatively connected to said processor for receiving a sequence of instructions which are effective to control the presentation of coordinated output; a

490 1. A method of communicating television program material to a multiplicity of receiver stations each of which includes a television receiver and computer, the computers being adapted to generate and transmit overlay signals to their associated television receivers, said overlay signals causing the display of user specific information related to said program material, and with at least some of said computers being programmed to process overlay modification control signals so as to modify the overlay signals transmitted to their associated receivers, each of said computers being programmed to accommodate a specific user application, comprising the steps of: transmitting a video signal containing a television program signal to said receivers, transmitting an instruct-tooverlay signal to said receiver stations at a time when the corresponding overlay is not being

for example -'654;

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For '654 see clms 1-71;

For '725 patent see claims 1-5;

For '490 patent see clms 1-13.
For Campbell et al see abnd parent of '791 patent corresponding to '791 col 17 line 65 through col 18 line 29.

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controller or computer operatively connected to said receiver section for controlling or communicating information to an output device; and a second output device operatively connected to said controller or computer for presenting said one or more outputs coordinated with said mass medium program.

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32. A method of delivering an individualized mass medium program presentation comprising mass medium program content and receiver station program information content at a receiver station, said receiver station having a receiver for receiving a mass medium program signal, a computer for processing and communicating information, and one or more output devices operatively connected to said receiver and said computer for delivering to a subscriber said presentation, with said computer comprising one or more data storage locations, said method comprising the steps of: receiving a plurality of timing signals or a timing signal specifying a series of times; detecting the presence of an instruct-to-coordinate signal received from a remote station or from a mass medium program source, said instruct-to-coordinate signal designating a specific one of said plurality of timing signals or a specific one of said series of times; selecting at a first controlled time one or more data to serve as a basis for some of

<u>490</u> 1. A method of communicating television program material to a multiplicity of receiver stations each of which includes a television receiver and computer, the computers being adapted to generate and transmit overlay signals to their associated television receivers, said overlay signals causing the display of user specific information related to said program material, and with at least some of said computers being programmed to process overlay modification control signals so as to modify the overlay signals transmitted to their associated receivers, each of said computers being programmed to accommodate a specific user application, comprising the steps of: transmitting a video signal containing a television program signal to said receivers, transmitting an instruct-tooverlay signal to said receiver stations at a time when the corresponding overlay is not being

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For '654 see clms 1-71;

For '725 patent see claims 1-5;

For '490 patent see clms 1-13.
For Campbell et al see abnd parent of '791 patent corresponding to '791 col 17 line 65 through col 18 line 29.

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said individualized mass medium program presentation; and subsequently outputting to said subscriber at a second controlled time in the course of a mass medium program presentation processed information of said selected one or more data, at least one of said first controlled time and said second controlled time being in response to said instruct-to-coordinate signal and said processed information of said selected one or more data being outputted either as combined or sequential output with said mass medium program or at a first of said one or more output devices concurrently with said mass medium program outputted at a second of said one or more output devices.

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33. An apparatus for providing a coordinated programming presentation at a mass medium program receiver station comprising: a first receiver for receiving a mass medium program at said mass medium program receiver station; a first output device for outputting said mass medium program; a first processor for receiving from a remote station or from a mass medium program source an instruct-to-coordinate signal that designates one or more data to select and input to a second processor; a second receiver operatively connected to said first processor for receiving said one or more data, said one or more data being associated with said coordinated programming presentation, and communicating said data to said second processor at a specific time; said second processor operatively connected to said second receiver for processing said designated data to output coordinated presentation content; and a second output device operatively connected to said second processor for outputting said coordinated

'490 1. A method of communicating television program material to a multiplicity of receiver stations each of which includes a television receiver and computer, the computers being adapted to generate and transmit overlay signals to their associated television receivers, said overlay signals causing the display of user specific information related to said program material, and with at least some of said computers being programmed to process overlay modification control signals so as to modify the overlay signals transmitted to their associated receivers, each of said computers being programmed to accommodate a specific user application, comprising the steps of: transmitting a video signal containing a television program signal to said receivers, transmitting an instruct-tooverlay signal to said receiver stations at a time when the corresponding overlay is not being

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For '654 see clms 1-71;

For '725 patent see claims 1-5;

For '490 patent see clms 1-13.
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| presentation content. | displayed, | |
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| • | receiving said video signal at | |
| | a plurality of receiver | |
| | stations and displaying | |
| | said program material on the | |
| | video receivers of selected | |
| | ones of said plurality | |
| | of receiver stations, | |
| | detecting the presence of said | |
| | instruct-to-overlay signal at | |
| | said selected | |
| | receiver stations and | |
| | coupling said instruct-to- | |
| · | | |
| | overlay signal to the | |
| | computers associated with the video | |
| | | |
| | receivers of said selected | |
| | stations, and | |
| | causing said last named | |
| | computers to generate and | |
| | transmit their overlay | |
| | signals to their associated | |
| | television receivers in | |
| | response to said | |
| | instruct-to-overlay signal, | |
| | thereby to present a display | |
| | at the selected | |
| | receiver stations including | |
| | the television program | |
| | material and the related | |
| | computer generated overlay, | |
| | the overlays displayed at a | |
| | multiplicity of said | |
| | receiver stations being | |
| | different, with each display | |
| | specific to a specific user. | |
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34. A method of delivering an individualized mass medium program presentation at a receiver station, said receiver station having at least one receiver for receiving mass medium program signals, a computer for processing and communicating information, and one or more output devices operatively connected to said receiver and said computer for delivering to a subscriber said presentation, with said computer comprising one or more data storage locations, said method comprising the steps of: receiving data to be processed or communicated in response to an instruct-to-coordinate signal; detecting the presence of said instruct-to-coordinate signal received from a remote station or from a mass medium program source, said instruct-to-coordinate signal designating one or more mass medium programs to be coordinated; selecting in response to said instruct-to-coordinate signal one or more of said received data to serve as a basis for some of said individualized mass medium program

490 1. A method of communicating television program material to a multiplicity of receiver stations each of which includes a television receiver and computer, the computers being adapted to generate and transmit overlay signals to their associated television receivers, said overlay signals causing the display of user specific information related to said program material, and with at least some of said computers being programmed to process overlay modification control signals so as to modify the overlay signals transmitted to their associated receivers, each of said computers being programmed to accommodate a specific user application, comprising the steps of: transmitting a video signal containing a television program signal to said receivers. transmitting an instruct-tooverlay signal to said receiver stations at a time when the corresponding overlay is not being

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For '725 patent see claims 1-5;

For '654 see clms 1-

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For '490 patent see clms 1-13.
For Campbell et al see abnd parent of '791 patent corresponding to '791 col 17 line 65 through col 18 line 29.

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presentation; and subsequently outputting to said subscriber processed information of said selected one or more data in the course of the presentation of said one or more mass medium programs, said processed information of said selected one or more data being outputted at one of said one or more output devices either as a combined or sequential output with said one or more mass medium programs or at a first of said one or more output devices concurrently or sequentially with said one or more mass medium programs outputted at a second of said one or more output devices.

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35. A method of providing data of interest to a receiver station from a remote data source, said data of interest for use at the receiver station in generating or outputting a receiver specific datum, said method comprising the steps of: storing data at said remote data source: receiving at said remote data source a query from said receiver station; transmitting said data from said remote data source to said receiver station in response to said step of receiving said query, said receiver station selecting and storing some of said transmitted data; transmitting from a second remote source to said receiver station a signal which controls said receiver station to select and process an instruct signal which is effective at said receiver station to coordinate two predetermined sequences, at least one of which is based on said selected data.

'490 1. A method of communicating television program material to a multiplicity of receiver stations each of which includes a television receiver and computer, the computers being adapted to generate and transmit overlay signals to their associated television receivers, said overlay signals causing the display of user specific information related to said program material, and with at least some of said computers being programmed to process overlay modification control signals so as to modify the overlay signals transmitted to their associated receivers, each of said computers being programmed to accommodate a specific user application, comprising the steps of: transmitting a video signal containing a television program signal to said receivers. transmitting an instruct-tooverlay signal to said receiver stations at a time when the corresponding overlay is not being

for example
-'654;
-'725 + Campbell e al;
-'725 + Jeffers et al;
-'490 + Campbell et
al;
-'725 + Jeffers et al.
-'825 + Campbell et
al;
-'825 + Jeffers et al.
-'277 + Campbell et

al;
-'277 + Jeffers et al:

For '654 see clms 1-71;

For '725 patent see claims 1-5;

For '490 patent see clms 1-13.
For Campbell et al see abnd parent of '791 patent corresponding to '791 col 17 line 65 through col 18 line 29.

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36. A method of communicating subscriber station information from a subscriber station to one or more remote data collection stations, said method comprising the steps of: (1) inputting a viewer's or participant's reaction at said subscriber station; (2) receiving at said subscriber station at least one datum that designates an instruct signal to process or an output to deliver in consequence of subscriber input; (3) determining the presence of said subscriber input at said subscriber station by processing said viewer's or participant's reaction; (4) processing said information and coordinating two predetermined sequences at said subscriber station in consequence of said step of determining; and (5) transferring from said subscriber station to said one or more remote data collection stations an indication confirming execution of said step of processing.

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'490 1. A method of communicating television program material to a multiplicity of receiver stations each of which includes a television receiver and computer, the computers being adapted to generate and transmit overlay signals to their associated television receivers, said overlay signals causing the display of user specific information related to said program material, and with at least some of said computers being programmed to process overlay modification control signals so as to modify the overlay signals transmitted to their associated receivers, each of said computers being programmed to accommodate a specific user application, comprising the steps of: transmitting a video signal containing a television program signal to said receivers. transmitting an instruct-tooverlay signal to said receiver stations at a time when the corresponding

overlay is not being

FINDING

- for example
- -'654;
- '725 + Campbell e al;
- -'725 + Jeffers et al;
- -'490 + Campbell et al;
- '725 + Jeffers et al.
- -'825 + Campbell et al;
- -'825 + Jeffers et al.
- -'277 + Campbell et
- -'277 + Jeffers et al

For '654 see clms 1-71;

For '725 patent see claims 1-5;

For '490 patent see clms 1-13.
For Campbell et al see abnd parent of '791 patent corresponding to '791 col 17 line 65 through col 18 line 29.

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40. A method of controlling a remote intermediate data transmitter station to communicate data to one or more receiver stations, with said remote intermediate data transmitter station including a broadcast or cablecast transmitter for transmitting one or more signals which are effective at a receiver station to instruct a computer or processor, a plurality of selective transfer devices each operatively connected to said broadcast or cablecast transmitter for communicating data, a data receiver for receiving at least one instruct signal, a control signal detector, and a controller or computer capable of controlling one or more of said selective transfer devices, and with said remote intermediate data transmitter station adapted to detect the presence of one or more control signals, to control the communication of said at least one instruct signal in response to said one or more control signals, and to deliver at its broadcast or cablecast transmitter said at least one instruct signal, said method comprising the steps of: (1) receiving an instruct

'490 1. A method of communicating television program material to a multiplicity of receiver stations each of which includes a television receiver and computer, the computers being adapted to generate and transmit overlay signals to their associated television receivers, said overlay signals causing the display of user specific information related to said program material, and with at least some of said computers being programmed to process overlay modification control signals so as to modify the overlay signals transmitted to their associated receivers, each of said computers being programmed to accommodate a specific user application, comprising the steps of: transmitting a video signal containing a television program signal to said receivers, transmitting an instruct-tooverlay signal to said receiver stations at a time when the corresponding overlay is not being

for example -'654;

- '725 + Campbell e al;

-'725 + Jeffers et al;

-'490 + Campbell et al;

- '725 + Jeffers et al.

-'825 + Campbell et al:

-'825 + Jeffers et al.

-'277 + Campbell et al:

-'277 + Jeffers et al

For '654 see clms 1-71;

For '725 patent see claims 1-5;

For '490 patent see clms 1-13.
For Campbell et al see abnd parent of '791 patent corresponding to '791 col 17 line 65 through col 18 line 29.

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signal to be transmitted by the remote intermediate data transmitter station and delivering said instruct signal to at least one origination transmitter, said instruct signal being effective at a receiver station to coordinate two predetermined sequences; (2) receiving one or more control signals which at the remote intermediate data transmitter station operate to control the communication of said instruct signal; and (3) transmitting said one or more control signals from said at least one origination transmitter before a specific time.

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43. A method of controlling a receiver station including the steps of: detecting one of the presence and absence of a broadcast or cablecast control signal; inputting an instruct-to-react signal to a processor based on said step of detecting; controlling said processor to output specific information in response to said step of inputting; and coordinating two predetermined sequences on the basis of information received from said processor based on said step of controlling.

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14. A method of processing signals including: (a) the step of receiving a carrier transmission; (b) the step of demodulating said carrier transmission to detect an information transmission thereon; (c) the step of detecting and identifying embedded signals on said information transmission; (d) the step of passing said embedded signals to a device or devices to be controlled based on instructions identified within said embedded signals; (e) the step of controlling said devices based on the instructions within said embedded signals; and (f) the step of recording the receipt of and passing to said devices of said embedded signals

for example

- -'654;
- -'725 + Campbell e al;
- -'725 + Jeffers et al;
- -'490 + Campbell et al;
- -'725 + Jeffers et al.
- -'825 + Campbell et al:
- -'825 + Jeffers et al.
- -'277 + Campbell et al:
- -'277 + Jeffers et al

For '654 see clms 1-71;

For '725 patent see claims 1-5;

For '490 patent see clms 1-13.
For Campbell et al see abnd parent of '791 patent corresponding to '791 col 17 line 65 through col 18 line 29.

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a receiver station, said

to said processor for

steps of: receiving a

broadcast or cablecast

receiver station having a

processor for passing and

inputting a timing signal,

executing instructions and a

clock operatively connected

said method comprising the

transmission; demodulating

said broadcast or cablecast

transmission to detect an

information transmission

thereon, said information

transmission comprising an instruct signal which is

effective to coordinate two

predetermined sequences; detecting said instruct signal

transmission and passing said

processor control, the passing

passing said instruct signal to

said controllable apparatus

signal; and controlling said

controllable apparatus based

of said instruct signal to a

controllable apparatus;

on the basis of a timing

on said instruct signal.

on said information

instruct signal to said processor; delaying, under

46. A method of controlling

'490

1. A method of communicating television program material to a multiplicity of receiver stations each of

which includes a television receiver and computer,

the computers being adapted to generate and transmit overlay signals to their

associated television receivers, said overlay

signals causing the display of user specific information related to said program

material, and with at least

some of said computers being programmed to process overlay modification control

signals so as to modify the overlay signals transmitted to

their associated

receivers, each of said computers being programmed to

accommodate a specific user application, comprising

the steps of:

transmitting a video signal containing a television

program signal to said

receivers,

transmitting an instruct-tooverlay signal to said

receiver stations at a time when the corresponding

overlay is not being

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for example

-'654;

-'725 + Campbell e al;

-'725 + Jeffers et al;

-'490 + Campbell et al;

-'725 + Jeffers et al.

-'825 + Campbell et

-'825 + Jeffers et al.

-'277 + Campbell et

-'277 + Jeffers et al

For '654 see clms 1-71;

For '725 patent see claims 1-5;

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For Campbell et al see abnd parent of '791 patent corresponding to '791 col 17 line 65 through col 18 line 29.

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47. A method of controlling at least one of a plurality of receiver stations each of which includes a broadcast or cablecast receiver, a processor, a signal detector, said signal detector adapted to detect signals within a broadcast or cablecast transmission, and said processor programmed to respond to detected signals communicated from said detector, and said method comprising the steps of: (1) receiving at a broadcast or cablecast transmitter station a first instruct signal which is effective at said at least one of a plurality of receiver stations to coordinate two predetermined sequences; (2) transferring said first instruct signal to a first transmitter; (3) receiving one or more first control signals at said transmitter station, said control signals addressing said first instruct signal to said processor of at least one specific receiver station; and (4) transferring said one or more first control signals to one of said first transmitter and a second transmitter, said transmitter station broadcasting or cablecasting said first instruct

490 1. A method of communicating television program material to a multiplicity of receiver stations each of which includes a television receiver and computer, the computers being adapted to generate and transmit overlay signals to their associated television receivers, said overlay signals causing the display of user specific information related to said program material, and with at least some of said computers being programmed to process overlay modification control signals so as to modify the overlay signals transmitted to their associated receivers, each of said computers being programmed to accommodate a specific user application, comprising the steps of: transmitting a video signal containing a television program signal to said receivers. transmitting an instruct-tooverlay signal to said receiver stations at a time when the corresponding overlay is not being

for example -'654: -'725 + Jeffers et al;

-'725 + Campbell e al;

-'490 + Campbell et

al;

-'725 + Jeffers et al.

-'825 + Campbell et

-'825 + Jeffers et al.

-'277 + Campbell et al:

-'277 + Jeffers et al

For '654 see clms 1-71;

For '725 patent see claims 1-5;

For '490 patent see clms 1-13. For Campbell et al see abnd parent of '791 patent corresponding to '791 col 17 line 65 through col 18 line 29.

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83. A method at a receiver station of coordinating the processing of data and television programming to present a user specific output, said method comprising the steps of: selecting a datum of interest; storing the selected datum of interest; receiving a plurality of units of television programming at the receiver station; selecting one of the plurality of received units of television programming; outputting the selected unit of television programming at at least one output device at the receiver station; receiving a plurality of control signals; generating a user specific display based on the stored datum of interest; outputting the user specific display to the at least one output device to present the user specific output comprising the outputted unit of television program and the outputted user specific display, at least one of said steps of generating and outputting the user specific display being performed in response to at least one of said received plurality of control signals.

490 1. A method of communicating television program material to a multiplicity of receiver stations each of which includes a television receiver and computer, the computers being adapted to generate and transmit overlay signals to their associated television receivers, said overlay signals causing the display of user specific information related to said program material, and with at least some of said computers being programmed to process overlay modification control signals so as to modify the overlay signals transmitted to their associated receivers, each of said computers being programmed to accommodate a specific user application, comprising the steps of: transmitting a video signal containing a television program signal to said receivers. transmitting an instruct-tooverlay signal to said receiver stations at a time when the corresponding

overlay is not being

for example
-'654;
-'725 + Campbell e al;
-'725 + Jeffers et al;
-'490 + Campbell et
al;
-'725 + Jeffers et al.
-'825 + Campbell et
al;
-'825 + Jeffers et al.
-'277 + Campbell et
al;
-'277 + Campbell et

For '654 see clms 1-71;

For '725 patent see claims 1-5;

For '490 patent see clms 1-13.
For Campbell et al see abnd parent of '791 patent corresponding to '791 col 17 line 65 through col 18 line 29.

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84. A method of coordinating the output of a user specific output at a receiver station, said receiver station having a computer for generating a user specific output, a detector operatively connected to said computer, and at least one output device, said method comprising the steps of: selecting at least one datum of interest; storing the selected at least one datum of interest; receiving a digital information transmission containing (I) programming to be outputted in a television presentation and (ii) a control signal; detecting the control signal in the digital information transmission; generating the user specific output based on said stored selected at least one datum: outputting to the at least one output device the generated user specific output based on said step of detecting, to present an output at the at least one output device including the user specific output.

490 1. A method of communicating television program material to a multiplicity of receiver stations each of which includes a television receiver and computer, the computers being adapted to generate and transmit overlay signals to their associated television receivers, said overlay signals causing the display of user specific information related to said program material, and with at least some of said computers being programmed to process overlay modification control signals so as to modify the overlay signals transmitted to their associated receivers, each of said computers being programmed to accommodate a specific user application, comprising the steps of: transmitting a video signal containing a television program signal to said receivers, transmitting an instruct-tooverlay signal to said receiver stations at a time when the corresponding overlay is not being

for example
-'654;
-'725 + Campbell e al;
-'725 + Jeffers et al;
-'490 + Campbell et al;
-'725 + Jeffers et al.
-'825 + Campbell et al;
-'825 + Jeffers et al.
-'277 + Campbell et al;
-'277 + Jeffers et al

For '654 see clms 1-71;

For '725 patent see claims 1-5;

For '490 patent see clms 1-13.
For Campbell et al see abnd parent of '791 patent corresponding to '791 col 17 line 65 through col 18 line 29.

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89. A method at a receiver station of coordinating the processing of data to present a user specific output, said method comprising the steps of: selecting a datum of interest, said step of selecting comprising: (a) storing at the receiver station an identification signal identifying the datum of interest; (b) receiving from a remote data source a plurality of data including the datum of interest, each of said plurality of data comprising an identification signal and an information signal; c) comparing the identification signal of the datum of interest to the identification signals of each of the received data; (d) selecting the datum of interest from the plurality of received data based on said step of comparing; storing the selected datum of interest; receiving a plurality of units of television programming at the receiver station; selecting one of the plurality of received units of programming; outputting the selected unit of programming on an output device at the receiver station; receiving a plurality of control signals;

490 1. A method of communicating television program material to a multiplicity of receiver stations each of which includes a television receiver and computer, the computers being adapted to generate and transmit overlay signals to their associated television receivers, said overlay signals causing the display of user specific information related to said program material, and with at least some of said computers being programmed to process overlay modification control signals so as to modify the overlay signals transmitted to their associated receivers, each of said computers being programmed to accommodate a specific user application, comprising the steps of: transmitting a video signal containing a television program signal to said receivers, transmitting an instruct-tooverlay signal to said receiver stations at a time when the corresponding overlay is not being

for example

- -'654;
- '725 + Campbell e al;
- -'725 + Jeffers et al;
- -'490 + Campbell et al:
- -'725 + Jeffers et al.
- -'825 + Campbell et al:
- -'825 + Jeffers et al.
- -'277 + Campbell et al:
- -'277 + Jeffers et al

For '654 see clms 1-71;

For '725 patent see claims 1-5:

For '490 patent see clms 1-13.
For Campbell et al see abnd parent of '791 patent corresponding to '791 col 17 line 65 through col 18 line 29.

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generating a user specific display based on at least the information signal of the stored datum of interest; outputting the user specific display to the output device to present the user specific output comprising the outputted unit of television program and the outputted user specific display, at least one of said steps of generating and outputting the display being performed in response to at least one of said received control signals.

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90. A method at a receiver station of coordinating the processing of data to, present a user specific output, said method comprising the steps of: receiving data in at least one information channel; selecting at least a portion of said received data that is of interest to the user; storing said selected at least said portion of said data; receiving television programming and a control signal in said at least one information channel; detecting the control signal in the at least one information channel; generating a user specific graphic based on said stored selected at least said portion of said data; outputting to a monitor the generated user specific graphic based on said step of detecting to present a visual display on the monitor comprising the user specific graphic.

1. A method of communicating television program material to a multiplicity of receiver stations each of which includes a television receiver and computer, the computers being adapted to generate and transmit overlay signals to their associated television receivers, said overlay signals causing the display of user specific information related to said program material, and with at least some of said computers being programmed to process overlay modification control signals so as to modify the overlay signals transmitted to their associated receivers, each of said computers being programmed to accommodate a specific user application, comprising the steps of: transmitting a video signal containing a television program signal to said receivers, transmitting an instruct-tooverlay signal to said receiver stations at a time when the corresponding overlay is not being

for example

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-'725 + Jeffers et al;

-'490 + Campbell et al;

-'725 + Jeffers et al.

-'825 + Campbell et

-'825 + Jeffers et al.

-'277 + Campbell et al:

-'277 + Jeffers et al

For '654 see clms 1-71:

For '725 patent see claims 1-5;

For '490 patent see clms 1-13. For Campbell et al see abnd parent of '791 patent corresponding to '791 col 17 line 65 through col 18 line 29.

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94. A method at a receiver station of coordinating the processing of data to present a user specific output, said method comprising the steps of: storing identification information identifying data of interest to the user; receiving data over an information channel; comparing the received data to the stored identification information; selecting, based on said step of comparing, the data of interest to the user from the received data; storing said selected data; receiving an information transmission comprising television programming and a control signal; detecting the control signal in the information transmission; generating a user specific graphic based on said stored selected data; outputting to a monitor the generated user specific graphic based on said step of detecting to present a visual display on the monitor including the user specific graphic.

'490 1. A method of communicating television program material to a multiplicity of receiver stations each of which includes a television receiver and computer, the computers being adapted to generate and transmit overlay signals to their associated television receivers, said overlay signals causing the display of user specific information related to said program material, and with at least some of said computers being programmed to process overlay modification control signals so as to modify the overlay signals transmitted to their associated receivers, each of said computers being programmed to accommodate a specific user application, comprising the steps of: transmitting a video signal containing a television program signal to said receivers, transmitting an instruct-tooverlay signal to said receiver stations at a time when the corresponding

overlay is not being

for example
-'654;
-'725 + Campbell e al;
-'725 + Jeffers et al;
-'490 + Campbell et

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-'725 + Jeffers et al. -'825 + Campbell et

-'825 + Jeffers et al. -'277 + Campbell et al.

-'277 + Jeffers et al

For '654 see clms 1-71;

For '725 patent see claims 1-5;

For '490 patent see clms 1-13.
For Campbell et al see abnd parent of '791 patent corresponding to '791 col 17 line 65 through col 18 line 29.

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95. A method at a receiver station of coordinating the processing of data to present a user specific output, said method comprising the steps of: receiving one of a television broadcast and a television cablecast transmission, said transmission comprising television programming, data, and a control signal; detecting the data in the transmission; selecting at least a portion of said detected data that is of interest to the user; storing said selected data; detecting the control signal in the transmission; generating a user specific graphic based on said stored selected data; outputting to a monitor the generated user specific graphic based on said step of detecting to present a visual display on the monitor including the user specific graphic.

'490 1. A method of communicating television program material to a multiplicity of receiver stations each of which includes a television receiver and computer, the computers being adapted to generate and transmit overlay signals to their associated television receivers, said overlay signals causing the display of user specific information related to said program material, and with at least some of said computers being programmed to process overlay modification control signals so as to modify the overlay signals transmitted to their associated receivers, each of said computers being programmed to accommodate a specific user application, comprising the steps of: transmitting a video signal containing a television program signal to said receivers, transmitting an instruct-tooverlay signal to said receiver stations at a time when the corresponding overlay is not being

for example
-'654;
-'725 + Campbell e al;
-'725 + Jeffers et al;
-'490 + Campbell et
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-'725 + Jeffers et al.
-'825 + Campbell et
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-'825 + Jeffers et al.
-'277 + Campbell et
al;
-'277 + Jeffers et al
For '654 see clms 171;

For '725 patent see claims 1-5;

For '490 patent see clms 1-13.
For Campbell et al see abnd parent of '791 patent corresponding to '791 col 17 line 65 through col 18 line 29.

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96. A method at a receiver station of coordinating the processing of data to present a user specific output, said method comprising the steps of: storing identification information identifying data of interest to the user; receiving a plurality of information channels; scanning each of said channels; identifying one of said plurality of information channels containing the data of interest to the user; tuning to the identified channel; detecting the data of interest received on the identified channel; storing said detected data of interest; receiving at least one information transmission containing television programming and a control signal; detecting the control signal in the information transmission; generating a user specific graphic based on said stored selected data; outputting to a monitor the generated user specific graphic based on said step of detecting to present a visual display on the monitor including the user specific graphic.

'490 1. A method of communicating television program material to a multiplicity of receiver stations each of which includes a television receiver and computer, the computers being adapted to generate and transmit overlay signals to their associated television receivers, said overlay signals causing the display of user specific information related to said program material, and with at least some of said computers being programmed to process overlay modification control signals so as to modify the overlay signals transmitted to their associated receivers, each of said computers being programmed to accommodate a specific user application, comprising the steps of: transmitting a video signal containing a television program signal to said receivers. transmitting an instruct-tooverlay signal to said receiver stations at a time when the corresponding overlay is not being

for example

- -'654;
- -'725 + Campbell e al;
- -'725 + Jeffers et al;
- -'490 + Campbell et al;
- -'725 + Jeffers et al.
- -'825 + Campbell et al:
- -'825 + Jeffers et al.
- -'277 + Campbell et al:
- -'277 + Jeffers et al

For '654 see clms 1-71:

For '725 patent see claims 1-5;

For '490 patent see clms 1-13.
For Campbell et al see abnd parent of '791 patent corresponding to '791 col 17 line 65 through col 18 line 29.

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97. A method at a receiver station of coordinating the processing of data to present a user specific output, said method comprising the steps of: storing identification information identifying data of interest to the user; receiving a plurality of information channels, at least one of said channels containing data; scanning each of said plurality of information channels; comparing the identification information to the data on each said scanned channel; identifying the channel containing the data of interest based on said step of comparing; tuning to the identified channel; detecting the data of interest received on the identified channel; storing said detected data of interest; receiving at least one information transmission containing television programming and a control signal; detecting the control signal in the at least one information transmission; generating a user specific graphic based on said stored selected data; outputting to a display device at the receiver station the generated user specific graphic based

'490 1. A method of communicating television program material to a multiplicity of receiver stations each of which includes a television receiver and computer. the computers being adapted to generate and transmit overlay signals to their associated television receivers, said overlay signals causing the display of user specific information related to said program material, and with at least some of said computers being programmed to process overlay modification control signals so as to modify the overlay signals transmitted to their associated receivers, each of said computers being programmed to accommodate a specific user application, comprising the steps of: transmitting a video signal containing a television program signal to said receivers, transmitting an instruct-tooverlay signal to said receiver stations at a time when the corresponding overlay is not being

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-'490 + Campbell et
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-'725 + Jeffers et al.
-'825 + Campbell et
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-'825 + Jeffers et al.
-'277 + Campbell et
al;
-'277 + Jeffers et al.
For '654 see clms 171;

For '725 patent see claims 1-5;

For '490 patent see clms 1-13.
For Campbell et al see abnd parent of '791 patent corresponding to '791 col 17 line 65 through col 18 line 29.

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98. A method at a receiver station of coordinating the processing of data and television programming to present a user specific output, said method comprising the steps of: selecting a datum of interest, said step of selecting comprising: (a) storing an identification signal at the receiver station identifying the datum of interest; (b) querying a remote data source; © receiving, in response to said step of querying, a plurality of data including the datum of interest from the remote data source, each of said plurality of data comprising an identification signal and an information signal; (d) selecting the datum of interest from the plurality of received data; storing the selected datum of interest; receiving a plurality of units of television programming at the receiver station; selecting one of the received plurality of units of television programming; outputting the selected unit of television programming on an output device at the receiver station; receiving a plurality of control signals; generating a user specific display based

490 1. A method of communicating television program material to a multiplicity of receiver stations each of which includes a television receiver and computer, the computers being adapted to generate and transmit overlay signals to their associated television receivers, said overlay signals causing the display of user specific information related to said program material, and with at least some of said computers being programmed to process overlay modification control signals so as to modify the overlay signals transmitted to their associated receivers, each of said computers being programmed to accommodate a specific user application, comprising the steps of: transmitting a video signal containing a television program signal to said receivers. transmitting an instruct-tooverlay signal to said receiver stations at a time when the corresponding overlay is not being

for example

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- -'825 + Jeffers et al.
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- -'277 + Jeffers et al

For '654 see clms 1-71;

For '725 patent see claims 1-5;

For '490 patent see clms 1-13.
For Campbell et al see abnd parent of '791 patent corresponding to '791 col 17 line 65 through col 18 line 29.

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on at least the information signal of the stored datum of interest; outputting the user specific display to the output device to present the user specific output comprising the outputted unit of television programming and the outputted user specific display, at least one of said steps of generating and outputting the user specific display being performed based on at least one of said received plurality of control signals.

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99. A method of providing data of interest to a receiver station from a remote data source, said data of interest for use at the receiver station in one of generating and outputting at least one receiver specific datum, said method comprising the steps of, storing data at said remote data source; receiving at said remote data source a query from said receiver station; transmitting said data from said remote data source to said receiver station in response to said step of receiving said query, said receiver station selecting and storing at least a portion of said transmitted data; transmitting from a second remote source to said receiver station a signal which controls said receiver station to select and process an instruct signal which is effective at said receiver station to coordinate data processing with at least one of communication and presentation of television programming.

'490 1. A method of communicating television program material to a multiplicity of receiver stations each of which includes a television receiver and computer, the computers being adapted to generate and transmit overlay signals to their associated television receivers, said overlay signals causing the display of user specific information related to said program material, and with at least some of said computers being programmed to process overlay modification control signals so as to modify the overlay signals transmitted to their associated receivers, each of said computers being programmed to accommodate a specific user application, comprising the steps of: transmitting a video signal containing a television program signal to said receivers. transmitting an instruct-tooverlay signal to said receiver stations at a time when the corresponding overlay is not being

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-'277 + Campbell et
al;
-'277 + Jeffers et al
For '654 see clms 171;

For '725 patent see
claims 1-5;

For '490 patent see clms 1-13.
For Campbell et al see abnd parent of '791 patent corresponding to '791 col 17 line 65 through col 18 line 29.

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100. A method of communicating subscriber station information from a subscriber station to at least one remote data collection station, said method comprising the steps of inputting a subscriber reaction at said subscriber station: receiving at said subscriber station information that designates at least one of an instruct signal to process and an output to deliver in consequence of subscriber input; determining the presence of said subscriber input at said subscriber station by processing said subscriber reaction; processing an instruct signal which is effective to coordinate data processing with at least one of communication and presentation of television programming at said subscriber station in consequence of said step of determining; and transferring from said subscriber station to at least one remote data collection station at least one datum at least one of confirming delivery of said instruct signal from said step of processing and confirming delivery of said effect from

14. A method of processing signals including: (a) the step of receiving a carrier transmission; (b) the step of demodulating said carrier transmission to detect an information transmission thereon; (c) the step of detecting and identifying embedded signals on said information transmission; (d) the step of passing said embedded signals to a device or devices to be controlled based on instructions identified within said embedded signals; (e) the step of controlling said devices based on the instructions within said embedded signals; and (f) the step of recording the receipt of and passing to said devices of said embedded signals

for example

- tor example
- -'654;
- -'725 + Campbell e al;
- -'725 + Jeffers et al;
- -'490 + Campbell et al;
- '725 + Jeffers et al.
- -'825 + Campbell et al:
- -'825 + Jeffers et al.
- -'277 + Campbell et al:
- -'277 + Jeffers et al

For '654 see clms 1-71;

For '725 patent see claims 1-5;

For '490 patent see clms 1-13.
For Campbell et al see abnd parent of '791 patent corresponding to '791 col 17 line 65 through col 18 line 29.

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| said step of processing. | | |

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104. A method of controlling a remote intermediate television transmitter station to communicate television program material to at least one receiver station, said remote intermediate television transmitter station including one of a broadcast and a cablecast transmitter, a plurality of selective transfer devices each operatively connected to said one of a broadcast and a cablecast transmitter, a receiver for receiving television programming from at least one origination transmitter station, a control signal detector, and one of a controller and a computer capable of controlling at least one of said plurality of selective transfer devices, and with said remote television transmitter station adapted to detect the presence of at least one control signal, and to deliver at said one of a broadcast and a cablecast transmitter said television programming, said method comprising the steps of receiving said television programming at said at least one origination transmitter station and delivering said television programming to at

'490

1. A method of communicating television program material to a multiplicity of receiver stations each of which includes a television receiver and computer, the computers being adapted to generate and transmit overlay signals to their associated television receivers, said overlay signals causing the display of user specific information related to said program material, and with at least some of said computers being programmed to process overlay modification control signals so as to modify the overlay signals transmitted to their associated receivers, each of said computers being programmed to accommodate a specific user application, comprising the steps of: transmitting a video signal containing a television program signal to said receivers. transmitting an instruct-tooverlay signal to said receiver stations at a time when the corresponding overlay is not being

for example

- -654;
- '725 + Campbell e al;
- -'725 + Jeffers et al;
- -'490 + Campbell et al;
- -'725 + Jeffers et al.
- -'825 + Campbell et al;
- -'825 + Jeffers et al.
- -'277 + Campbell et
- -'277 + Jeffers et al

For '654 see clms 1-71:

For '725 patent see claims 1-5;

For '490 patent see clms 1-13. For Campbell et al see abnd parent of '791 patent corresponding to '791 col 17 line 65 through col 18 line 29.

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least one origination transmitter, said television programming to have at least one associated instruct signal which is effective at the at least one receiver station to coordinate data processing with at least one of communication and presentation of said television programming; receiving at least one control signal which at the remote intermediate television transmitter station operates to control the communication of at least one of said television programming and said at least one instruct signal; and transmitting said at least one control signal from. said at least one origination transmitter before a specific time.

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108. A method of controlling a receiver station including the steps of: detecting one of the presence and absence of one of a broadcast and a cablecast control signal; inputting an instruct-to-react signal to a processor based on said step of detecting one of the presence and absence of a control signal; controlling said processor to output specific information in response to said step of inputting an instruct-to-react signal; and coordinating data processing with communication or presentation of television programming on the basis of information received from said processor based on said step of controlling a processor.

'825 14. A method of processing signals including: (a) the step

of receiving a carrier transmission; (b) the step of demodulating said carrier transmission to detect an information transmission thereon; (c) the step of detecting and identifying embedded signals on said information transmission; (d) the step of passing said embedded signals to a device or devices to be controlled based on instructions identified within said embedded signals; (e) the step of controlling said devices based on the instructions within said embedded signals; and (f) the step of recording the receipt of and passing to said devices of said embedded signals

for example

- -654;
- '725 + Campbell e al;
- -'725 + Jeffers et al;
- -'490 + Campbell et al:
- -'725 + Jeffers et al.
- -'825 + Campbell et
- -'825 + Jeffers et al.
- -'277 + Campbell et al:
- -277 + Jeffers et al

For '654 see clms 1-71;

For '725 patent see claims 1-5;

For '490 patent see clms 1-13. For Campbell et al see abnd parent of '791 patent corresponding to '791 col 17 line 65 through col 18 line 29.

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112. A method of controlling a receiver station, said receiver station having a processor for passing and executing instructions and a clock operatively connected to said processor for inputting a timing signal, said method comprising the steps of receiving one of a broadcast and a cablecast transmission; demodulating said one of a broadcast and a cablecast transmission to detect an information transmission thereon, said information transmission comprising an instruct signal which is effective to coordinate data processing with at least one of communication and presentation of television programming; detecting said instruct signal on said information transmission and passing said instruct signal to said processor; delaying, under processor control, the passing of said instruct signal to a controllable apparatus; passing said instruct signal to said controllable apparatus on the basis of said timing signal; and controlling said controllable apparatus based on said instruct signal.

'825 14. A method of processing signals including: (a) the step of receiving a carrier transmission; (b) the step of demodulating said carrier transmission to detect an information transmission thereon; (c) the step of detecting and identifying embedded signals on said information transmission; (d) the step of passing said embedded signals to a device or devices to be controlled based on instructions identified within said embedded signals; (e) the step of controlling said devices based on the instructions within said embedded signals; and (f) the step of recording the receipt of and passing to said devices of said embedded signals

for example

- -'654;
- -'725 + Campbell e al;
- -'725 + Jeffers et al;
- -'490 + Campbell et al;
- -'725 + Jeffers et al.
- -'825 + Campbell et
- -'825 + Jeffers et al.
- -'277 + Campbell et al:
- -'277 + Jeffers et al

For '654 see clms 1-71;

For '725 patent see claims 1-5;

For '490 patent see clms 1-13.
For Campbell et al see abnd parent of '791 patent corresponding to '791 col 17 line 65 through col 18 line 29.

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FINDING

113. A method of controlling at least one of a plurality of receiver stations each of which includes one of a broadcast and a cablecast mass medium programming receiver, at least one output device, a control signal detector, at least one processor capable of responding to an instruct signal, and with each said at least one of said plurality of receiver stations adapted to detect and respond to at least one instruct signal, said method comprising the steps of: receiving at one of a broadcast and a cablecast transmitter station an instruct signal which is effective at said at least one of said plurality of receiver stations to coordinate data processing with at least one of communication and presentation of television programming and delivering the instruct signal to a transmitter; receiving at said transmitter station at least one control signal which at the receiver station operates to communicate the instruct signal to a specific processor; and transferring said at least one control signal to the transmitter, said transmitter

'725 1. A method of communicating data to a multiplicity of receiver stations, each of which includes a computer adapted to generate and transmit user specific signals to one or more associated output devices. with at least some of said computers being programmed to process modification control signals so as to modify the user specific signals transmitted to their associated output devices, each of said computers being programmed to accommodate a special user application, comprising the steps of: transmitting an instruct-to-process signal to said computers to cause each of said computers to process data in accordance with its associated special user application, transmitting an instruct-to-output signal to said computers at a time when the corresponding user specific information is not being transmitted to an output device, detecting the presence of said instruct-to-

for example -'654: -'725 + Campbell e al; -'725 + Jeffers et al; -'490 + Campbell et al: -'725 + Jeffers et al. -'825 + Campbell et al; -'825 + Jeffers et al. -'277 + Campbell et -'277 + Jeffers et al For '654 see clms 1-71; For '725 patent see claims 1-5; For '490 patent see clms 1-13. For Campbell et al see abnd parent of '791 patent corresponding to '791 col 17 line 65 through col 18 line 29. For Jeffers et al see

'510 patent col 14

lines 58-64.

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transmitting the instruct output signal at selected signal and the at least one receiver control signal. stations and coupling said instruct-to-output signal to the computers associated with said selected stations, and causing said last named computers simultaneously to output their user specific signals to their associated output devices in response to said instruct-to-output signal, thereby to transmit to the selected output devices an output signal comprising said data and said related user specific signals, the output signals at a multiplicity of said output devices being different, with each output signal specific to a specific user.

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144. A method of coordinating a presentation at a plurality of output devices at a receiver station, said method comprising the steps of: tuning a first receiver to a first one of a broadcast transmission and a cablecast transmission; receiving said first tuned one of said broadcast transmission and said cablecast transmission, wherein said transmission includes programming and a first control signal; outputting the received programming on a first output device; detecting the received first control signal; tuning a second receiver to one of a channel and a frequency based on said detected first control signal to receive a second one of a broadcast transmission and a cablecast transmission, wherein at least a portion of said second one of said broadcast transmission and said cablecast transmission is related to the received programming; outputting the related at least a portion of said second one of said broadcast transmission and said cablecast transmission to a second output device.

490 1. A method of communicating television program material to a multiplicity of receiver stations each of which includes a television receiver and computer, the computers being adapted to generate and transmit overlay signals to their associated television receivers, said overlay signals causing the display of user specific information related to said program material, and with at least some of said computers being programmed to process overlay modification control signals so as to modify the overlay signals transmitted to their associated receivers, each of said computers being programmed to accommodate a specific user application, comprising the steps of: transmitting a video signal containing a television program signal to said receivers. transmitting an instruct-tooverlay signal to said receiver stations at a time when the corresponding overlay is not being

for example
-'654;
-'725 + Campbell e al;
-'725 + Jeffers et al;
-'490 + Campbell et
al;
-'725 + Jeffers et al.
-'825 + Campbell et
al;
-'825 + Jeffers et al.
-'277 + Campbell et
al;

For '654 see clms 1-71;

-'277 + Jeffers et al

For '725 patent see claims 1-5;

For '490 patent see clms 1-13.
For Campbell et al see abnd parent of '791 patent corresponding to '791 col 17 line 65 through col 18 line 29.

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145. A method of coordinating a presentation at a plurality of output devices at a receiver station, said method comprising the steps of, tuning a television receiver to a first one of a broadcast transmission and a cablecast transmission; receiving said first tuned one of said broadcast transmission and said cablecast transmission, wherein said transmission includes television programming and a first control signal; outputting the received television programming on a first output device; detecting the received first control signal; tuning an information receiver to at least one of a channel and a frequency based on said detected first control signal to receive a second one of a broadcast transmission and a cablecast transmission, wherein at least a portion of said second one of said broadcast transmission and said cablecast transmission is related to the received television programming; outputting the related at least a portion of said second one of said broadcast

'725 1. A method of communicating data to a multiplicity of receiver stations, each of which includes a computer adapted to generate and transmit user specific signals to one or more associated output devices, with at least some of said computers being programmed to process modification control signals so as to modify the user specific signals transmitted to their associated output devices, each of said computers being programmed to accommodate a special user application, comprising the steps of: transmitting an instruct-to-process signal to said computers to cause each of said computers to process data in accordance with its associated special user application, transmitting an instruct-to-output signal to said computers at a time when the corresponding user specific information is not being transmitted to an output device, detecting the presence of said instruct-tofor example - 654;

-'725 + Campbell e al;

-'725 + Jeffers et al;

-'490 + Campbell et al;

-'725 + Jeffers et al.

-'825 + Campbell et al:

-'825 + Jeffers et al.

-'277 + Campbell et al:

-'277 + Jeffers et al

For '654 see clms 1-71;

For '725 patent see claims 1-5;

For '490 patent see clms 1-13. For Campbell et al see abnd parent of '791 patent corresponding to '791 col 17 line 65 through col 18 line 29.

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| transmission and said | output signal at selected | |
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| cablecast transmission to a | receiver | |
| second output device. | stations and coupling said | |
| | instruct-to-output signal to | |
| | the computers associated | |
| | with said selected stations, | |
| | and | |
| | causing said last named | |
| | computers simultaneously to | |
| | output their user specific | |
| | signals to their associated | |
| | output devices in response to | |
| | said instruct-to-output signal, | |
| | thereby to transmit to the | |
| | selected output devices | |
| | an output signal comprising | |
| | said data and said related | |
| | user specific signals, | |
| | the output signals at a | |
| | multiplicity of said output | |
| | devices being different, | |
| | with each output signal | |
| | specific to a specific user. | |
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146. A method of coordinating a presentation at a plurality of output devices at a receiver station, said method comprising the steps of: tuning a television receiver to a first one of a broadcast transmission and a cablecast transmissions; receiving said first tuned one of said broadcast transmission and said cablecast transmission. wherein said transmission includes television programming and a first control signal; outputting the received television programming on a first output device detecting the received first control signal; tuning a radio receiver to at least one of a channel and a frequency based on said detected first control signal to receive a second one of a broadcast transmission and a cablecast transmission. wherein said second one of said broadcast transmission and said cablecast transmission includes a radio program, said radio program being related to said received television programming; outputting the received radio program to an output device.

'725 1. A method of communicating data to a multiplicity of receiver stations, each of which includes a computer adapted to generate and transmit user specific signals to one or more associated output devices. with at least some of said computers being programmed to process modification control signals so as to modify the user specific signals transmitted to their associated output devices, each of said computers being programmed to accommodate a special user application, comprising the steps of: transmitting an instruct-to-process signal to said computers to cause each of said computers to process data in accordance with its associated special user application, transmitting an instruct-to-output signal to said computers at a time when the corresponding user specific information is not being transmitted to an output device, detecting the presence of said instruct-tofor example

- -'654;
- '725 + Campbell e al;
- -'725 + Jeffers et al;
- -'490 + Campbell et al:
- '725 + Jeffers et al.
- -'825 + Campbell et al;
- -'825 + Jeffers et al.
- -'277 + Campbell et
- -'277 + Jeffers et al

For '654 see clms 1-71:

For '725 patent see claims 1-5;

For '490 patent see clms 1-13.
For Campbell et al see abnd parent of '791 patent corresponding to '791 col 17 line 65 through col 18 line 29.

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| output signal at selected receiver stations and coupling said instruct-to-output signal to | |
|---|--|
| the computers associated with said selected stations, and causing said last named computers simultaneously to output their user specific signals to their associated output devices in response to said instruct-to-output signal, thereby to transmit to the selected output devices an output signal comprising said data and said related user specific signals, the output signals at a multiplicity of said output devices being different, with each output signal specific user. | |

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147. A method of communicating subscriber station information from a subscriber station to at least one remote data collection station, said method comprising the steps of: (1) inputting a subscriber reaction at the subscriber station; (2) receiving at said subscriber station information that designates at least one of at least one instruct signal to process and an output to deliver in consequence of a subscriber input; (3) determining the presence of said subscriber input at said subscriber station by processing said subscriber reaction; (4) processing at least one instruct signal which is effective to coordinate a media presentation at said subscriber station in consequence of said step of determining; and (5) transferring from said subscriber station to said at least one remote data collection station at least one datum confirming delivery of at least one of: (a) said at least one instruct signal from said step of processing; and (b) said effect from said step of processing.

'490 1. A method of communicating television program material to a multiplicity of receiver stations each of which includes a television receiver and computer, the computers being adapted to generate and transmit overlay signals to their associated television receivers, said overlay signals causing the display of user specific information related to said program material, and with at least some of said computers being programmed to process overlay modification control signals so as to modify the overlay signals transmitted to their associated receivers, each of said computers being programmed to accommodate a specific user application, comprising the steps of: transmitting a video signal containing a television program signal to said receivers, transmitting an instruct-tooverlay signal to said receiver stations at a time when the corresponding overlay is not being

for example

- -'654;
- -'725 + Campbell e al;
- -'725 + Jeffers et al;
- -'490 + Campbell et al;
- -'725 + Jeffers et al.
- -'825 + Campbell et al:
- -'825 + Jeffers et al.
- -'277 + Campbell et
- -'277 + Jeffers et al

For '654 see clms 1-71;

For '725 patent see claims 1-5;

For '490 patent see clms 1-13.
For Campbell et al see abnd parent of '791 patent corresponding to '791 col 17 line 65 through col 18 line 29.

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151. A method of controlling a remote television transmitter station to communicate television programming material to at least one receiver station. with said remote television transmitter station including one of a broadcast transmitter and a cablecast transmitter for transmitting television programming, a plurality of selective transfer devices each operatively connected to said one of said broadcast transmitter and said cablecast transmitter for communicating said television programming, a television receiver for receiving said television processor, wherein each of said at least one remote television transmitter station is adapted to detect the presence of at least one control signal, and to deliver at said one of said broadcast transmitter and said cablecast transmitter said television programming, said method comprising the steps of: (1) receiving said television programming at said at least one origination transmitter station and delivering said television programming to at least one origination

'490 1. A method of communicating television program material to a multiplicity of receiver stations each of which includes a television receiver and computer, the computers being adapted to generate and transmit overlay signals to their associated television receivers, said overlay signals causing the display of user specific information related to said program material, and with at least some of said computers being programmed to process overlay modification control signals so as to modify the overlay signals transmitted to their associated receivers, each of said computers being programmed to accommodate a specific user application, comprising the steps of: transmitting a video signal containing a television program signal to said receivers, transmitting an instruct-tooverlay signal to said receiver stations at a time when the corresponding overlay is not being

for example -'654: - '725 + Campbell e al; - '725 + Jeffers et al; -'490 + Campbell et al: -'725 + Jeffers et al. -'825 + Campbell et -'825 + Jeffers et al. -'277 + Campbell et al: -'277 + Jeffers et al For '654 see clms 1-71; For '725 patent see claims 1-5; For '490 patent see clms 1-13. For Campbell et al see abnd parent of '791 patent corresponding to '791 col 17 line 65 through col 18 line 29. For Jeffers et al see '510 patent col 14 lines 58-64.

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transmission transmitter, said television programming having an instruct signal which is effective at at least one of said remote television transmitter station and said at least one receiver station to coordinate a media presentation; (2) receiving said at least one control signal which at the remote television transmitter station operates to control the communication of said television programming; and (3) transmitting said at least one control signal from said at least one origination transmitter station before a specific time.

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155. A method controlling at least one remote transmitter station to deliver a receiver specific output at a receiver station and controlling said receiver station to communicate at least one receiver specific datum to a remote data collection station, wherein said receiver station is remote from said at least one remote transmitter station and said remote data collection station is remote from said receiver station. said method comprising the steps of. (1) receiving at said at least one remote transmitter station at least one instruct signal which operates to coordinate a media presentation and operates at said receiver station to assemble and communicate said at least one receiver specific datum to said remote data collection station; (2) receiving a control signal which operates at said at least one remote transmitter station to control the communication of said at least one instruct signal and communicating said control signal to said at least one remote transmitter station; (3) receiving at least one of a code and an indication

'490 1. A method of communicating television program material to a multiplicity of receiver stations each of which includes a television receiver and computer, the computers being adapted to generate and transmit overlay signals to their associated television receivers, said overlay signals causing the display of user specific information related to said program material, and with at least some of said computers being programmed to process overlay modification control signals so as to modify the overlay signals transmitted to their associated receivers, each of said computers being programmed to accommodate a specific user application, comprising the steps of: transmitting a video signal containing a television program signal to said receivers, transmitting an instruct-tooverlay signal to said receiver stations at a time when the corresponding overlay is not being

for example

- -'654;
- -'725 + Campbell e al;
- -'725 + Jeffers et al;
- -'490 + Campbell et al;
- -'725 + Jeffers et al.
- -'825 + Campbell et al:
- -'825 + Jeffers et al.
- -'277 + Campbell et
- -'277 + Jeffers et al

For '654 see clms 1-71;

For '725 patent see claims 1-5;

For '490 patent see clms 1-13.
For Campbell et al see abnd parent of '791 patent corresponding to '791 col 17 line 65 through col 18 line 29.

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designating said at least one instruct signal to be transmitted by said at least one remote transmitter station, wherein said at least one of said code and said indication to serve at said receiver station as a source from which to select said at least one receiver specific datum; and (4) transmitting at least one information transmission including said at least one instruct signal and said at least one of said code and said indicator from said at least one remote transmitter station.

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158. A method of controlling at least one receiver station each of said at least one receiver station including a mass medium programming receiver, a signal detector, at least one of at least one computer and at least one processor, wherein each of said at least one receiver station is adapted to detect the presence of at least one control signal and to input a subscriber reaction to a specific offer communicated in mass medium programming, said method comprising the steps of: (1) receiving an instruct signal at a transmitter station and delivering said instruct signal to a transmitter, said instruct signal being effective at said at least one receiver station to coordinate a media presentation; (2) receiving at least one of a code and a datum at said transmitter station, wherein said at least one of said code and said datum designates at least one of said instruct signal and said subscriber reaction; (3) receiving at least one control signal at said transmitter station, wherein said at least one control signal at said at

'490 1. A method of communicating television program material to a multiplicity of receiver stations each of which includes a television receiver and computer, the computers being adapted to generate and transmit overlay signals to their associated television receivers, said overlay signals causing the display of user specific information related to said program material, and with at least some of said computers being programmed to process overlay modification control signals so as to modify the overlay signals transmitted to their associated receivers, each of said computers being programmed to accommodate a specific user application, comprising the steps of: transmitting a video signal containing a television program signal to said receivers, transmitting an instruct-tooverlay signal to said receiver stations at a time when the corresponding overlay is not being

for example

- -'654;
- -'725 + Campbell e al;
- -'725 + Jeffers et al;
- -'490 + Campbell et al;
- -'725 + Jeffers et al.
- -'825 + Campbell et al:
- -'825 + Jeffers et al.
- -'277 + Campbell et al:
- -'277 + Jeffers et al

For '654 see clms 1-71;

For '725 patent see claims 1-5;

For '490 patent see clms 1-13.
For Campbell et al see abnd parent of '791 patent corresponding to '791 col 17 line 65 through col 18 line 29.

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least one receiver station operates to at least one of decrypt and enable at least a portion of said instruct signal; (4) transferring at least one of said at least one of said code and said datum and said at least one control signal to the transmitter at said transmitter station; and (5) transmitting said instruct signal and said at least one of said at least one of said code and said datum and said at least one control signal from said transmitter station.

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163. A method of controlling a receiver station including the steps of. detecting one of a presence and an absence of one of a broadcast control signal and a cablecast control signal; inputting an instruct-to-react signal to a processor based on said step of detecting controlling said processor to output specific information in response to said instruct-to-react signal; and coordinating a media presentation on the basis of said specific information received from said processor based on said step of controlling said processor.

490 1. A method of communicating television program material to a multiplicity of receiver stations each of which includes a television receiver and computer, the computers being adapted to generate and transmit overlay signals to their associated television receivers, said overlay signals causing the display of user specific information related to said program material, and with at least some of said computers being programmed to process overlay modification control signals so as to modify the overlay signals transmitted to their associated receivers, each of said computers being programmed to accommodate a specific user application, comprising the steps of: transmitting a video signal containing a television program signal to said receivers. transmitting an instruct-tooverlay signal to said receiver stations at a time when the corresponding overlay is not being

for example -'654;

-'725 + Campbell e al;

-'725 + Jeffers et al;

-'490 + Campbell et al:

-'725 + Jeffers et al.

-'825 + Campbell et al:

-'825 + Jeffers et al.

-'277 + Campbell et al:

-'277 + Jeffers et al

For '654 see clms 1-71;

For '725 patent see claims 1-5;

For '490 patent see clms 1-13.
For Campbell et al see abnd parent of '791 patent corresponding to '791 col 17 line 65 through col 18 line 29.

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167. A method of controlling a receiver station, wherein said receiver station has a processor for passing and executing instructions and a clock operatively connected to said processor for inputting a timing signal, said method comprising the steps of: receiving one of a broadcast transmission and a cablecast transmission; demodulating said one of said broadcast transmission and said cablecast transmission to detect an information transmission thereon, said information transmission including an instruct signal which is effective to coordinate media presentation; detecting said instruct signal on said information transmission and passing said instruct signal to said processor; delaying, under processor control, the passing of said instruct signal to a controllable apparatus; passing said instruct signal to said controllable apparatus on the basis of the timing signal; and coordinating said media presentation based on said instruct signal.

'490 1. A method of communicating television program material to a multiplicity of receiver stations each of which includes a television receiver and computer, the computers being adapted to generate and transmit overlay signals to their associated television receivers, said overlay signals causing the display of user specific information related to said program material, and with at least some of said computers being programmed to process overlay modification control signals so as to modify the overlay signals transmitted to their associated receivers, each of said computers being programmed to accommodate a specific user application, comprising the steps of: transmitting a video signal containing a television program signal to said receivers, transmitting an instruct-tooverlay signal to said receiver stations at a time when the corresponding overlay is not being

for example -'654;

- '725 + Campbell e al;

-'725 + Jeffers et al;

-'490 + Campbell et al:

-'725 + Jeffers et al.

-'825 + Campbell et al:

-'825 + Jeffers et al.

-'277 + Campbell et al:

-'277 + Jeffers et al

For '654 see clms 1-71;

For '725 patent see claims 1-5;

For '490 patent see clms 1-13.
For Campbell et al see abnd parent of '791 patent corresponding to '791 col 17 line 65 through col 18 line 29.

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168. A method of communicating data and update material to at least one mass medium programming receiver station, each of said at least one mass medium programming receiver station including at least one of a broadcast receiver and a cablecast receiver, a data storage device, a control signal detector, and a computer, wherein each of said at least one mass medium programming receiver station is adapted to detect and respond to at least one instruct signal and to store data for subsequent processing, said method comprising the steps of: (1) receiving data to be transmitted and delivering the data to a transmitter; (2) receiving the at least one instruct signal which at the at least one mass medium programming receiver station is effective to coordinate a media presentation based on the data; (3) transferring said at least one instruct signal to the transmitter; and (4) transmitting at least one information transmission including said data and said at least one instruct signal.

'490 1. A method of communicating television program material to a multiplicity of receiver stations each of which includes a television receiver and computer, the computers being adapted to generate and transmit overlay signals to their associated television receivers, said overlay signals causing the display of user specific information related to said program material, and with at least some of said computers being programmed to process overlay modification control signals so as to modify the overlay signals transmitted to their associated receivers, each of said computers being programmed to accommodate a specific user application, comprising the steps of: transmitting a video signal containing a television program signal to said receivers, transmitting an instruct-tooverlay signal to said receiver stations at a time when the corresponding overlay is not being

for example
-'654;
-'725 + Campbell e al;
-'725 + Jeffers et al;
-'490 + Campbell et al;

-'725 + Jeffers et al. -'825 + Campbell et al:

-'825 + Jeffers et al. -'277 + Campbell et al;

-'277 + Jeffers et al

For '654 see clms 1-71;

For '725 patent see claims 1-5;

For '490 patent see clms 1-13.
For Campbell et al see abnd parent of '791 patent corresponding to '791 col 17 line 65 through col 18 line 29.

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APPENDIX A

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172. A method of delivering user specific programming at a receiver station, said receiver station including a receiver, a detector, a computer, and at least one first output device, said method comprising the steps of: receiving first data and video programming, said video programming being of a duration, wherein only a portion of said duration contains at least a first time interval of specific relevance, and wherein at least one of said first data and said video programming is received from at least one remote transmitter station; selecting and delivering said video programming to said at least one first output device for output to a user; detecting said first data before a time period during which user specific information will be processed and delivering said first data to said computer; generating second data to serve as a basis for delivering said user specific programming by processing at least a first of said first data in said time period; communicating at least one of (I) at least a second of said first data and (ii) at least a

'490 1. A method of communicating television program material to a multiplicity of receiver stations each of which includes a television receiver and computer, the computers being adapted to generate and transmit overlay signals to their associated television receivers, said overlay signals causing the display of user specific information related to said program material, and with at least some of said computers being programmed to process overlay modification control signals so as to modify the overlay signals transmitted to their associated receivers, each of said computers being programmed to accommodate a specific user application, comprising the steps of: transmitting a video signal containing a television program signal to said receivers, transmitting an instruct-tooverlay signal to said receiver stations at a time when the corresponding

overlay is not being

for example -'654: -'725 + Campbell e al; -'725 + Jeffers et al; -'490 + Campbell et al; -'725 + Jeffers et al. -'825 + Campbell et -'825 + Jeffers et al. -'277 + Campbell et al: -'277 + Jeffers et al For '654 see clms 1-71: For '725 patent see claims 1-5; For '490 patent see

For '490 patent see clms 1-13.
For Campbell et al see abnd parent of '791 patent corresponding to '791 col 17 line 65 through col 18 line 29.

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first of said second data to said at least one first output device in said at least said first time interval of specific relevance based on said step of generating; and outputting said user specific programming, said user specific programming including said video programming and said at least one of said first data and said second data.

least one processor

one receiver station is

at said at least one receiver

transfer said at least one of

said first data to at least a

first transmitter at a first

said video programming and

second data; commencing to

station to generate said

PENDING

199. A method of delivering user specific programming at least one receiver station. each of said at least one receiver station including a receiver, at least one output device, a detector, and at operatively connected to said at least one output device, wherein each of said at least adapted to detect first data and generate second data, said second data to serve as a basis for communicating user specific information, said method comprising the steps of: receiving at least one of video programming and said first data at at least a first transmitter station, said video programming to be displayed at said at least one output device for at least a duration of time, wherein only a portion of said duration of time is to include at least one time interval of specific relevance, and wherein said first data are to be processed

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490 1. A method of communicating television program material to a multiplicity of receiver stations each of which includes a television receiver and computer, the computers being adapted to generate and transmit overlay signals to their associated television receivers, said overlay signals causing the display of user specific information related to said program material, and with at least some of said computers being programmed to process overlay modification control signals so as to modify the overlay signals transmitted to their associated receivers, each of said computers being programmed to accommodate a specific user application, comprising the steps of: transmitting a video signal containing a television program signal to said receivers, transmitting an instruct-tooverlay signal to said receiver stations at a time when the corresponding overlay is not being

FINDING

for example

-'654;

-'725 + Campbell e al;

-'725 + Jeffers et al;

-'490 + Campbell et al;

- '725 + Jeffers et al.

-'825 + Campbell et al:

-'825 + Jeffers et al.

-'277 + Campbell et al:

-'277 + Jeffers et al

For '654 see clms 1-71:

For '725 patent see claims 1-5;

For '490 patent see clms 1-13. For Campbell et al see abnd parent of '791' patent corresponding to '791 col 17 line 65 through col 18 line 29.

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specific time; and transmitting from said at least one transmitter station at least one information transmission including said at least one of said video programming and said first data.

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215. A method of delivering user specific programming at least one receiver station. each of said at least one receiver station including a receiver, at least one output device, a detector, and at least one processor operatively connected to said at least one output device, wherein each of said at least one receiver station is adapted to detect first data and generate second data, said second data to serve as a basis for communicating user specific information, said method comprising the steps of: (1) receiving at least one of video programming and said first data at at least a first transmitter station, said video programming to be outputted at said at least one output device for at least a duration of time, wherein only a portion of said duration of time to include at least one time interval of specific relevance, and wherein said first data are to be processed at said at least one receiver station to generate said second data; (2) receiving at least a first control signal which operates at said at least said first transmitter station to

490 1. A method of communicating television program material to a multiplicity of receiver stations each of which includes a television receiver and computer, the computers being adapted to generate and transmit overlay signals to their associated television receivers, said overlay signals causing the display of user specific information related to said program material, and with at least some of said computers being programmed to process overlay modification control signals so as to modify the overlay signals transmitted to their associated receivers, each of said computers being programmed to accommodate a specific user application, comprising the steps of: transmitting a video signal containing a television program signal to said receivers, transmitting an instruct-tooverlay signal to said receiver stations at a time when the corresponding overlay is not being

for example

- 654;
- -'725 + Campbell e'al;
- -'725 + Jeffers et al;
- -'490 + Campbell et al;
- -'725 + Jeffers et al.
- -'825 + Campbell et al:
- -'825 + Jeffers et al.
- -'277 + Campbell et al:
- -'277 + Jeffers et al

For '654 see clms 1-71:

For '725 patent see claims 1-5;

For '490 patent see clms 1-13.
For Campbell et al see abnd parent of '791 patent corresponding to '791 col 17 line 65 through col 18 line 29.

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communicate said at least one of said video programming and said first data to at least a first transmitter; and (3) transmitting from said at least one transmitter station at least one information transmission including said at least one of said video programming and said first data.

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235. A method of delivering user specific programming at a receiver station, said receiver station including a receiver, a detector, a computer, and at least one output device, said method comprising the steps of: receiving first data and video programming, said video programming being of a duration, wherein only a portion of said duration contains at least one time interval of specific relevance, and at least one of said first data and said video programming is received from at least one remote transmitter station; selecting and delivering said video programming to said at least one output device for output to a user; storing said first data before a time period during which user specific information will be processed; generating second data to serve as a basis for delivering said user specific programming by processing at least one of said first data in said time period; communicating said second data to said at least one output device in said at least one time interval of specific relevance based on said step

'490 1. A method of communicating television program material to a multiplicity of receiver stations each of which includes a television receiver and computer, the computers being adapted to generate and transmit overlay signals to their associated television receivers, said overlay signals causing the display of user specific information related to said program material, and with at least some of said computers being programmed to process overlay modification control signals so as to modify the overlay signals transmitted to their associated receivers, each of said computers being programmed to accommodate a specific user application, comprising the steps of: transmitting a video signal containing a television program signal to said receivers, transmitting an instruct-tooverlay signal to said receiver stations at a time when the corresponding overlay is not being

for example
-'654;
-'725 + Campbell e al;
-'725 + Jeffers et al;
-'490 + Campbell et
al;
-'725 + Jeffers et al.
-'825 + Campbell et

al;
-'825 + Jeffers et al.
-'277 + Campbell et

-'277 + Jeffers et al

al:

For '654 see clms 1-71;

For '725 patent see claims 1-5;

For '490 patent see clms 1-13.
For Campbell et al see abnd parent of '791 patent corresponding to '791 col 17 line 65 through col 18 line 29.

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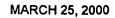
APPENDIX A

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of generating second data; and outputting said user specific programming, said user specific programming including said video programming and said second data.



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| | ALLEGED "GROUP" | ACTIVE | INACTIVE | CONSOLIDATION STATUS OF ACTIVE CASE |
|----------|-----------------|---------|----------|-------------------------------------|
| 1 | ADVT | n/a c | n/a | n/a |
| 2 | ASCO | n/a | n/a | n/a |
| 3 | ASRE | 441,701 | 441,027 | CONSOLIDATED |
| 4 | BCON | 473,484 | 440,837 | CONSOLIDATED |
| 5 | BUDG | n/a | n/a | n/a |
| 6 | CHAN | n/a | n/a | n/a |
| 7 | CLER | n/a | n/a | n/a |
| 8 | COMB | 466,894 | 469,078 | CONSOLIDATED |
| 9 | DATA | 397,636 | 441,996 | CONSOLIDATED |
| 10 | DECR | 449,263 | 449,431 | CONSOLIDATED |
| 11 | DIGI | 435,757 | 478,794 | CONSOLIDATED |
| 12 | DOWN | 470,051 | 469,106 | NONE TO DATE |
| 13 | | n/a | n/a | n/a |
| 14 | | n/a | n/a | n/a |
| 15 | FANA | n/a | n/a | n/a |
| 16 | | 474,139 | 441,880 | NONE TO DATE |
| 17 | FNAV | 437,864 | 444,756 | NONE TO DATE |
| 18 | FNET | 488,439 | | |
| 19 | HEAD | | 487,893 | CONSOLIDATED |
| 20 | | 442,335 | 442,165 | NONE TO DATE |
| ****** | HOST | 437,791 | 438,206 | CONSOLIDATED |
| 21 | 12CM | 446,431 | 437,045 | CONSOLIDATED |
| 22 | 12CR | 486,258 | 447,621 | CONSOLIDATED |
| 23 | I2GE | 511,491 | 438,659 | NONE TO DATE |
| 24 | I2GR | 437,635 | 441,577 | NONE TO DATE |
| 25 | IZRE | 487,851 | 483,174 | CONSOLIDATED |
| 26 | IMAG | n/a | n/a | n/a |
| 27 | INTE | 470,571 | 471,024 | CONSOLIDATED |
| 28 | METE | 452,395 | 483,980 | CONSOLIDATED |
| 29 | MICR | n/a | n/a | n/a |
| 30 | MKTR | 474,964 | 480,058 | CONSOLIDATED |
| 31 | MSG | n/a | n/a | n/a |
| 32 | MSTA | 438,216 | 483,269 | NONE TO DATE |
| 33 | MULT | 487,526 | 437,044 | CONSOLIDATED |
| 34 | NAUT | 477,805 | 437,937 | CONSOLIDATED |
| 35 | NAVI | 459,216 | 480,383 | CONSOLIDATED |
| 36 | NCOM | n/a | n/a | n/a |
| 37 | NECA | 475,342 | 445,290 | CONSOLIDATED |
| 38 | NGEN | n/a | n/a | n/a |
| 39 | OPNS | 442,383 | 488,620 | NONE TO DATE |
| 40 | PARA | 488,378 | 477,564 | NONE TO DATE |
| 41 | POLI | n/a | n/a | n/a |
| 42 | PROB | n/a | n/a | n/a |
| 43 | RCOM | 449,281 | 449,800 | CONSOLIDATED |
| 44 | RECO | n/a | n/a | n/a |
| 45 | REST | 498,022 | 442,335 | NONE TO DATE |
| 46 | SCHE | n/a | n/a | n/a |
| 47 | SETT | 449,523 | 487,649 | CONSOLIDATED |
| 48 | SKIP | n/a | n/a | n/a |
| 49 | STUD | 474,146 | 483,054 | CONSOLIDATED |
| 50 | SWIT | 469,612 | 442,507 | NONE TO DATE |
| 51 | SYNC | | | |
| 52 | TELE | 449,532 | 449,110 | CONSOLIDATED |
| 52 53 | | n/a | n/a | n/a |
| ****** | TIME | 446,494 | 446,429 | NONE TO DATE |
| 54 | TRAN | 487,536 | 482,573 | CONSOLIDATED |
| 55 | VERI | 448,326 | 447,711 | NONE TO DATE |
| 56 | VIEW | 485,283 | 470,476 | CONSOLIDATED |